South Australian Year Book

1994

COVER: Vineyard, Clare Valley
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South Australian Year Book

No. 28 : 1994

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PREFACE

The *South Australian Year Book* is the main reference publication produced by the South Australian Office of the Australian Bureau of Statistics. It provides an historical and geographical context and a comprehensive statistical profile of the social, demographic and economic development of this State as well as a statistical snapshot of South Australia today. The *South Australian Year Book* is also illustrative of the wide range of social and economic data which is available from the Australian Bureau of Statistics.

Most of the statistics contained in this volume relate to the years ended December 1992 or June 1993. More detailed, and in most cases more recent, statistics are available in other ABS publications. The more significant of these publications are listed at the end of the relevant chapters of the Year Book, while the ABS *Catalogue of Publications and Products* (1101.0) lists all current publications of the ABS.

This, the twenty–eighth issue features a special supplement entitled *Oenography (Words on Wine in the State Library of South Australia).* This is supported by a special chapter reviewing the wine industry in South Australia. This issue also contains an article on Kangaroo Island, the next in an ongoing series of articles presenting a detailed study of the various regions of the State. The two pictorial sections show facets of South Australia. The first section gives a pictorial glimpse of the range of courses that the Institutes of Vocational Education offer through their TAFE courses. The second section complements the article on Kangaroo Island.

I extend my thanks and appreciation to all those staff involved in the preparation of the *South Australian Year Book* and the organisations who have kindly supplied material for inclusion in this edition.

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December 1993

NOTE OF APPRECIATION

ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated; without it the wide range of statistics published by the ABS would not be available for general use by the community. Information received by the ABS is treated in strict confidence as required by the Census and Statistics Act.

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GENERAL INFORMATION

Symbols used

n.a.	not collected
n.e.c.	not elsewhere classified
n.e.i.	not elsewhere included
n.e.s.	not elsewhere specified
n.p.	not available for publication but included in totals where applicable
n.y.a.	figures not yet available
p	preliminary
..	not applicable
–	nil or less than half the final digit shown
———	break in continuity of series (where drawn across a column between two consecutive figures)

Other forms of usage

Yearly periods shown as 1991 refer to the year ended 31 December 1991; those shown as 1990–91 refer to the year ended 30 June 1991. Other periods are specifically indicated.

In general, statistics in this volume relate to South Australia. A few tables, which are appropriately footnoted, include details for the Northern Territory.

Values are shown in Australian dollars ($ or $A).

Where figures have been rounded, discrepancies may occur between sums of component items and totals.

Adjustments are made randomly to data from the Population Census to protect the confidentiality of individuals and may not add to totals.

Citation of Acts

Acts of the South Australian Parliament are cited in italics e.g. *Planning Act 1982*. Acts of the Commonwealth Parliament are cited in italics immediately followed by jurisdiction (abbreviated) in parentheses e.g. *Census and Statistics Act 1905* (Cwlth).

Services provided by ABS

A comprehensive range of statistics is made available to the clients in published form. Some statistics, including those which are not published, may be available in the form of microfiche, photocopy, computer printout, clerically–extracted tabulation, floppy disk, magnetic tape and compact disk. A wide range of statistics can also be accessed electronically.

The *Catalogue of Publications and Products* (1101.0) shows the range of ABS products. These products are available for sale from the ABS Bookshop. The library holds copies of ABS publications and is open to the public.

The ABS has a publication subscription service. Readers are encouraged to subscribe to ensure they receive them on a regular and timely basis.

The Information Consultancy Service, which operates on a fee for service basis, has specialist staff to assist and advise clients with their statistical inquiries.

For more information about these services telephone the Information Officer on Adelaide (08) 237 7100 or call at the ABS, 55 Currie Street or write to Information Services, ABS, GPO Box 2272, Adelaide 5001.

Chapter 1

NATURAL ENVIRONMENT

1.1 DESCRIPTION

Size and location

The State of South Australia has the Southern Ocean to the south and is flanked on the other sides by land. It lies south of the 26th parallel of south latitude and has as a western boundary the 129th meridian of east longitude. The eastern boundary, north of the River Murray, corresponds with the 141st meridian, while to the south, between the river and the sea, the boundary lies approximately three kilometres to the west of this meridian.

The State is approximately 1,201 kilometres from east to west at the northern boundary and 1,139 kilometres at the head of the Great Australian Bight; from north to south it varies from 630 kilometres near the western extremity to approximately 1,336 kilometres near the eastern boundary; its coastline, excluding islands, measures approximately 3,700 kilometres. South Australia covers a total area of 984,377 square kilometres (one–eighth of the area of the Australian continent); however, approximately one–third of this area has no significant economic use and over one–half is devoted to extensive pastoral pursuits. Approximately 99 per cent of the population live south of the 32nd parallel.

A comparison of the areas, length of coastline and standard time of the various States and Territories is shown in the following table.

Area, Coastline and Standard Times, Australia

	Estimated area (a)			*Standard time*	
State or Territory	*Total*	*Percentage of total area*	*Length of coastline (a)*	*Meridian selected*	*Ahead of GMT*
	'000 km²		*km*		*hours*
New South Wales	802	10.43	1,900	150°E	*(b)*10.0
Victoria	228	2.96	1,800	150°E	*(b)*10.0
Queensland	1,727	22.48	7,400	150°E	10.0
Western Australia	2,526	32.87	12,500	120°E	8.0
South Australia	**984**	**12.81**	**3,700**	**142°30′E**	***(b)*9.5**
Tasmania	68	0.88	3,200	150°E	*(b)*10.0
Northern Territory	1,346	17.52	6,200	142°30′E	9.5
Australian Capital Territory	2	0.03	35	150°E	*(b)*10.0
Australia	*7,682*	*100.00*	*36,735*	..	..

(a) As determined by the Survey and Land Information Group.
(b) Because of 'daylight saving' an hour should be added from late October to early March.

The areas and length of coastline were determined by the Survey and Land Information Group by manually digitising these features from the 1:250,000 map series of Australia. This means that only features of measurable size at this

scale were considered. About 60,000 points were digitised at an approximate spacing of 0.5 kilometres. These points were joined by chords as the basis for calculation of areas and coastline lengths by computer.

Distances Between Adelaide and Other Capital Cities
(Kilometres)

Method of travel	*Canberra*	*Sydney*	*Melbourne*	*Brisbane*	*Perth*	*Hobart*	*Darwin*
Road *(a)*	1,202	1,424	730	2,056	2,716	..	3,042
Rail	1,595	1,692	776	2,641	2,661	..	..
Sea	..	1,833	949	2,761	*(b)*2,509	1,436	*(c)*5,799
Air	988	1,196	660	1,967	2,216	1,283	2,766

(a) RAA recommended routes. *(b)* To Fremantle. *(c)* *Via* Fremantle.

Standard time

In terms of the *Standard Time Act 1898* South Australia has used 'the mean time of the meridian of longitude 142.5 degrees east of Greenwich' as standard time since 1 May 1899. This time, known in Australia as Central Standard Time, is nine hours thirty minutes ahead of Greenwich Mean Time, one hour thirty minutes ahead of Western Standard Time used in Western Australia and thirty minutes behind Eastern Standard Time used by States on the east coast of Australia.

The *Daylight Saving Act Amendment Act 1972*, provided for the observance of daylight saving in the summer of 1972–73, and in each summer since, from October to March.

A special article on the basis of time keeping and the determination of time standards was included on pages 4–5 of the *South Australian Year Book 1984*. An article on the determination of the time of sunrise and sunset was included on pages 6–7 of the same issue.

Physical features

South Australia is a land of generally low relief, the inland area being largely covered by featureless plains, or sand and gibber deserts. Approximately 50 per cent of the State is less than 150 metres above sea level and over 80 per cent is less than 300 metres. Even the dominant mountains, the Mount Lofty–Flinders Ranges system, nowhere exceed 1,200 metres and have at no point proved difficult barriers to communications.

Kangaroo Island, approximately 480 kilometres in circumference and covering 4,350 square kilometres, is the predominant island off the South Australian coastline. There are, however, approximately 100 islands in all, relatively few of which are utilised.

The most important mountains are the Mount Lofty–Flinders Ranges system. Kangaroo Island structurally belongs to these ranges which, together with parallel subsidiary ranges, extend north from Cape Jervis some 800 kilometres to the northern end of Lake Torrens. In the south the rounded hills of the Mount Lofty Ranges are of comparatively low altitude with Mount Lofty, the highest peak, being 727 metres. The western side of these ranges presents steep scarps to the Adelaide Plains while on the eastern side more gentle slopes merge into the Murray Basin.

To the north the Flinders Ranges are of greater height and sharper outline than their southern counterpart. St Mary Peak of 1,168 metres is the highest point. North of Peterborough there is a divergence from the main range which stretches *via* the Olary Ridges to the Barrier Range and Broken Hill. In the far north the ranges again diverge; one spur circling the northern end of Lake Torrens and the other ending north of Lake Frome. The Flinders Ranges contain some unusual basins of which Wilpena Pound is perhaps the best known.

The western half of the State is largely occupied by a low plateau over which an intermittent series of low ranges, including the Warburton, Stuart, Denison, Peake, and Everard Ranges, stretch from the Flinders to the somewhat higher Musgrave Ranges in the far north–west. Mount Woodroffe (1,435 metres), the highest point in the State, is located in the Musgrave Ranges.

The comparatively low hills of the Gawler Ranges form the northern side of the Eyre Peninsula triangle, and to the west of Whyalla lie the economically important Middleback Ranges. Isolated peaks of volcanic origin are found in the extreme south–east of the State.

The River Murray, which drains approximately one–seventh of Australia, enters the sea in South Australia and is the State's only major river. The fall of the Murray is very slight, dropping less than twenty–two metres over the 642 kilometres between the border and the sea. For the 216 kilometres to Overland Corner the river occupies a wide valley and then passes through a narrower steeper–sided valley to Lakes Alexandrina and Albert at its heavily silted mouth.

Surrounding the northern Flinders Ranges is a series of vast lakes which are in reality lakes only after particularly heavy rainfall, normally appearing as shallow depressions with a salt or clay encrusted surface. Lake Eyre, the largest of these, is sixteen metres below mean sea level and is fed by a series of intermittently flowing rivers, including the Finke, the Diamantina and Cooper Creek, which traverse the plains of the north–east, constituting one of the largest areas of internal drainage in the world. To the south of Lake Eyre are Lakes Gairdner, Frome and Torrens, the last named being 240 kilometres in length.

1.2 CLIMATE AND METEOROLOGY

The weather at mid–latitudes in the southern hemisphere is generally not as extreme as that in the northern hemisphere. This is because the southern hemisphere has extensive ocean areas and no large land masses linking the polar regions to the mid–latitudes. The ameliorating effect of land–sea distribution is particularly noticeable in southern South Australia.

South Australia has hot, dry summers with relatively mild nights, and cool winters with most rainfall occurring during May to August.

Briefly, the basic features of the South Australian climate are hot, dry summers with relatively mild nights, and cool but not severe winters with most rainfall occurring during the months of May, June, July and August.

Meteorological observations

Meteorological services throughout Australia are provided by the Bureau of Meteorology. The South Australian Regional Office is located in Adelaide. It issues forecasts and warnings for the State, provides bulletins of weather statistics and reports on climatic issues such as trends in South Australia's recorded temperatures.

Rainfall

Average annual rainfall

South Australia is by far the driest of the Australian States with about four–fifths of the State normally receiving less than 250 millimetres of rain annually. By comparison only about one–third of the continent receives less than 250 millimetres.

As can be seen from the annual rainfall map, isohyets generally show highest annual averages along the Flinders and Mount Lofty Ranges and near the southern coast. Averages fall off rapidly to less than 250 millimetres within 150 to 250 kilometres inland. They then decrease more gradually to below 150 millimetres near Lake Eyre. This area is the driest part of Australia: there have been protracted periods when the annual rainfall here has been less than 75 millimetres. Mean monthly rainfalls for selected recording stations are shown in the following table.

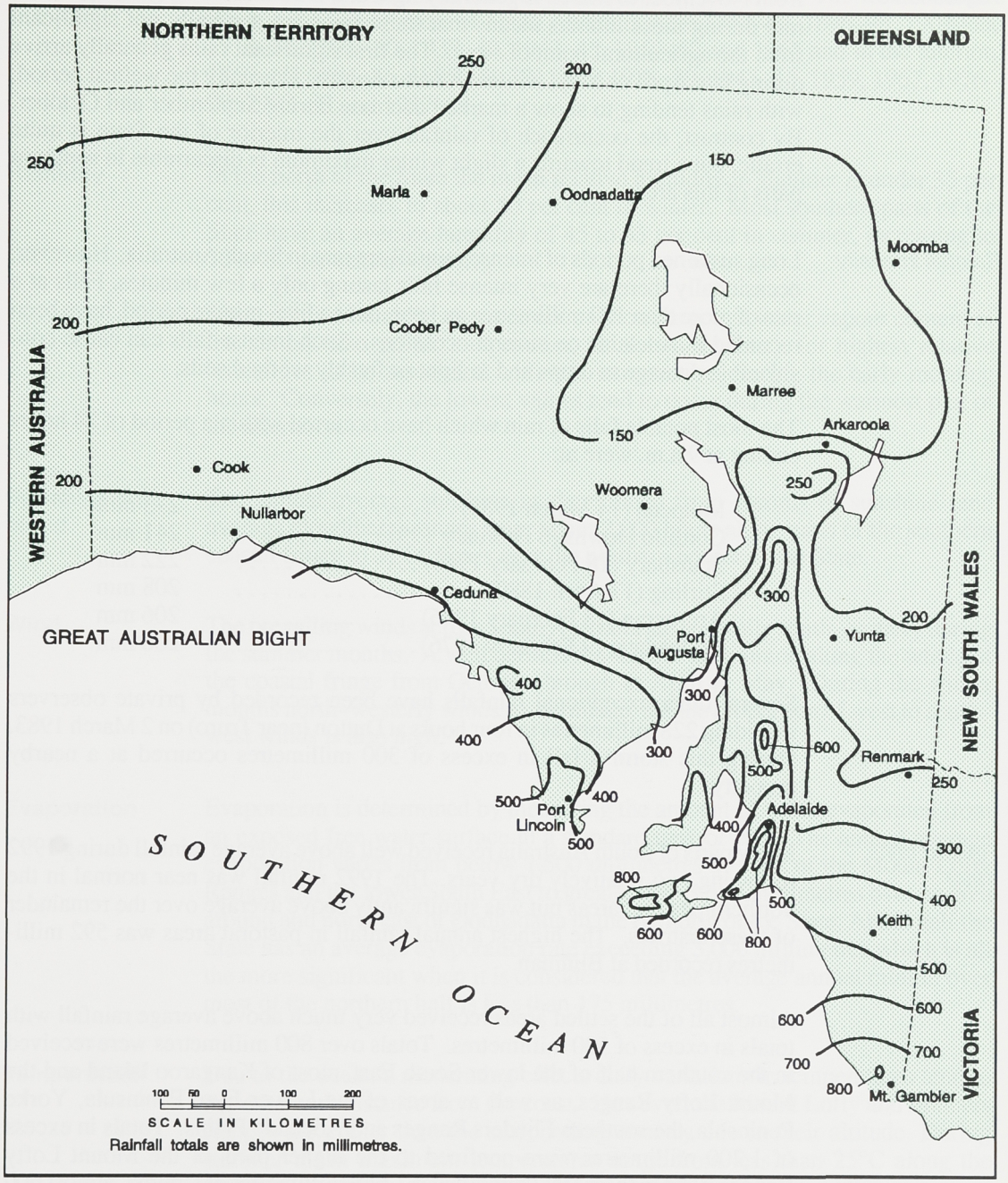
Mean Rainfall : Selected Stations[(a)]
(Millimetres)

Period	*Ceduna*	*Ernabella*	*Kingscote*	*Moonta*	*Mount Gambier*	*Oodnadatta*
January	10	44	14	14	25	28
February	14	36	17	17	26	29
March	17	27	18	19	36	14
April	21	20	36	35	58	11
May	36	19	59	47	73	15
June	37	17	72	49	81	12
July	42	12	78	46	100	10
August	37	14	66	41	94	9
September	28	12	47	36	71	10
October	26	24	36	31	64	13
November	21	22	23	22	47	11
December	21	29	19	17	37	14
Year	**310**	**276**	**486**	**374**	**712**	**176**

Period	*Murray Bridge*	*Pinnaroo*	*Port Lincoln*	*Port Pirie*	*Renmark*	*Woomera*
January	17	17	13	17	16	16
February	18	22	15	18	18	21
March	21	19	20	18	15	17
April	29	25	38	29	19	13
May	36	36	58	40	26	23
June	37	36	74	41	25	15
July	35	36	80	34	23	17
August	37	39	70	36	26	15
September	36	36	50	35	27	16
October	34	34	35	33	27	17
November	25	26	22	24	21	17
December	23	21	19	22	18	14
Year	**348**	**347**	**494**	**347**	**261**	**201**

(a) For all years of record to end of 1992.

ANNUAL RAINFALL, SOUTH AUSTRALIA



Seasonal distribution of rainfall

In the settled areas of the State, rainfall has a marked winter maximum. Rainfall from November to March is generally light and unreliable. A high evaporation rate during these months means that these rains are generally not significant from the agricultural point of view. The first significant rains generally arrive during late April or May; winter (June to August) is usually the wettest period, with rains tending to show a marked decrease during September and October. By contrast, the occurrence of rainfall over the interior of the State is quite erratic, but a trend towards a slight winter maximum is discernible in southern parts of this area.

Rainfall intensity

Long sustained periods of intense rainfall are rare in South Australia. However, occasionally there are very intense falls lasting only a few minutes. Falls at a rate of more than 100 millimetres an hour, over a five–minute period, have been recorded in Adelaide on several occasions. Such intense falls can cause considerable damage to crops and to light or freshly worked soils.

The most notable falls of rain which have occurred within a period of 24 hours ending at 9 a.m. were at:

Motpena (14 March 1989)	273 mm
Cordillo Downs (6 February 1991)	241 mm
Stansbury (18 February 1946)	222 mm
Stirling (17 April 1889)	208 mm
Ardrossan (18 February 1946)	206 mm
Oodnadatta (9 February 1976)	200 mm

Several other exceptional rainfalls have been recorded by private observers including 228 millimetres in four hours at Dutton (near Truro) on 2 March 1983. During this storm a fall in excess of 300 millimetres occurred at a nearby property.

Record rains 1992

Many parts of South Australia received well above average rainfall during 1992 following two relatively dry years. The 1992 rainfall was near normal in the northern pastoral areas but was significantly above average over the remainder of these districts. The highest annual rainfall in pastoral areas was 592 millimetres recorded at Blinman.

Almost all of the settled areas received very much above average rainfall with totals in excess of 500 millimetres. Totals over 800 millimetres were received in the southern half of the lower South East, most of Kangaroo Island and the Mount Lofty Ranges, as well as areas of the Lower Eyre Peninsula, Yorke Peninsula, the southern Flinders Ranges and Adelaide Plains. Totals in excess of 1,200 millimetres were confined to the higher parts of the Mount Lofty Ranges. The highest 1992 rainfall was 1,668 millimetres at Uraidla, almost 600 millimetres above normal.

Snow and hail

The occurrence of snow in South Australia is infrequent and is mainly confined to the Mount Lofty and southern Flinders Ranges. Most falls are very light and do not persist. Hail has been reported in all parts of the State but falls most frequently about the southern coasts and ranges during winter. Although hail is more frequent in winter, summer thunderstorms produce the largest hailstones.

Droughts

When dry conditions persist over wide areas for long periods of time, drought, the worst of all Australian climatic hazards, is experienced. The worst drought years in the settled areas of South Australia were 1863–67, 1896–98, 1901–03, 1913–16, 1926–30, 1939–40, 1943–45, 1959–62 and 1965 and in the interior, 1859–60, 1884–86, 1895–98, 1911–15, 1928–29, 1943–45, 1959, 1967, 1976–77, 1982–83 and 1987–88.

Humidity

In the north of the State the mean relative humidity in summer is under 35 per cent, this increases to about 50 per cent in winter. Most southern parts of the State have an average humidity of 45 to 55 per cent in summer, increasing to 70 to 80 per cent in winter.

Since relative humidity depends not only on the actual water vapour content of the air but also on air temperature, there is a tendency for highest relative humidities to be associated with low temperatures during the early morning hours. Conversely, the lowest values tend to occur during the warmest part of the afternoon.

Sunshine and cloud

The annual average sunshine as determined from records of sunshine (and average cloudiness) ranges from about 2,000 hours along parts of the southern coastal fringe to 3,500 hours near the northern border of the State.

Wind

The prevailing winds across South Australia are generally south–easterly during the summer months. A well defined sea–breeze is common along the whole of the coastal fringe from October through to April or May. During the winter months north–westerly winds predominate, but the proportion of west to south–west winds is also high.

Evaporation

Evaporation is determined by measuring the amount of water evaporated from an exposed free water surface in a standard tank or pan. The annual average evaporation varies from below 1,500 millimetres in parts of the Mount Lofty Ranges and the lower South East to greater than 3,500 millimetres over an area around and north east of Oodnadatta in the far north of the State. About half the State has an average evaporation rate exceeding 3,000 millimetres which is all the more significant when it is considered that the average annual rainfall over most of the northern half is less than 175 millimetres.

Temperature

Due to the ocean's moderating effects daily variations in temperatures tend to increase with distance from the coast. However, the Mount Lofty and Flinders Ranges are cooler than the surrounding country due to their altitude. During summer mean maximum temperatures range from less than 25°C along the southern coasts to more than 37°C in the far north. In winter minimum temperatures are generally greater than 7°C along the coasts and over the north–west of the State. Most of the inland has values higher than 3°C. However, mean minima of less than 3°C are found on the higher parts of the ranges. The highest temperature recorded in South Australia was 50.7°C at Oodnadatta on 2 January 1960, and the lowest –8.2°C at Yongala on 20 July 1976.

Mean Maximum Temperatures : Selected Stations
(°Celsius)

Period	Ceduna	Mount Gambier	Oodnadatta	Port Pirie	Kingscote	Murray Bridge	Renmark
January	28.6	25.3	37.5	31.6	24.8	28.7	32.5
February ...	28.0	25.0	36.5	31.5	24.3	29.0	32.1
March	26.6	22.8	33.9	29.0	22.8	26.4	28.8
April	23.8	19.1	28.2	24.6	20.5	23.3	24.1
May.....	20.6	16.0	22.9	20.0	17.9	19.3	19.5
June.....	18.1	13.7	19.7	17.0	15.8	16.5	16.7
July	17.2	13.0	19.4	16.2	14.9	16.0	16.1
August.....	18.3	13.9	21.7	17.6	15.3	17.1	17.8
September..	21.1	15.7	25.9	20.6	16.7	19.4	20.7
October....	23.5	17.6	30.2	24.2	19.1	22.3	24.3
November..	26.2	19.9	33.7	27.2	21.1	25.2	27.9
December ..	27.5	22.7	36.4	29.5	22.9	27.3	30.4
Year	**23.3**	**18.7**	**28.8**	**24.1**	**19.7**	**22.5**	**24.2**

Mean Minimum Temperatures : Selected Stations
(°Celsius)

Period	Ceduna	Mount Gambier	Oodnadatta	Port Pirie	Kingscote	Murray Bridge	Renmark
January	14.9	10.8	22.6	17.7	15.2	14.4	16.6
February ...	14.9	11.4	22.2	17.9	15.6	14.6	16.5
March	13.2	10.3	19.3	16.2	14.5	13.2	14.3
April	10.7	8.6	14.2	13.4	12.6	10.6	11.0
May.....	8.5	7.3	9.6	10.8	10.7	8.1	8.2
June.....	6.4	5.6	6.5	8.4	9.2	5.8	5.8
July	5.7	4.9	5.6	7.7	8.3	5.4	5.1
August.....	6.1	5.3	7.2	8.3	8.3	6.0	6.1
September..	7.7	6.1	11.0	9.7	9.1	7.1	8.1
October....	9.7	7.0	15.0	12.0	10.4	9.0	10.7
November..	12.1	8.2	18.4	14.4	12.1	11.3	13.3
December ..	13.9	9.8	21.1	16.4	13.7	13.1	15.2
Year	**10.3**	**7.9**	**14.4**	**12.7**	**11.6**	**9.9**	**10.9**

Climate of Adelaide

Adelaide weather observations were originally taken at a site on West Terrace, Adelaide. In February 1977 the South Australian Regional Office moved to College Road, Kent Town. Data presented here are for Kent Town unless otherwise specified.

Rainfall

Adelaide is the driest Australian capital city. Summer rainfall is light and unreliable; completely rainless months are not uncommon. Monthly rainfall averages over 50 millimetres from May to September and is fairly reliable. June, the wettest month, averages under 80 millimetres. The annual average rainfall for Adelaide, at Kent Town, is 585 millimetres. At West Terrace the average was 528 millimetres, based on 139 years of records. Annual rainfall totals for Adelaide have ranged from a high of 882.4 millimetres (Kent Town 1992) to the lowest fall of 257 millimetres (West Terrace 1967).

Temperature

In January and February, Adelaide's warmest months, the mean maximum temperature is 29°C. On average, temperatures in excess of 40°C are recorded on about three days per year. July is the coldest month with a mean maximum of only 15°C.

Climatological Data, Kent Town, Adelaide

Temperature and Rainfall based on a composite record of Greenwich Stand and Stevenson Screen observations

	Temperature				Rainfall	
	Maximum		Minimum			
Month	Mean	Highest recorded	Mean	Lowest recorded	Mean	Highest monthly and yearly total
	°C	°C	°C	°C	mm	mm
January	28.6	44.2	16.6	9.2	22	40
February	29.1	43.4	16.8	10.6	22	25
March	26.4	41.9	15.4	7.2	26	106
April	22.5	36.7	12.3	5.5	47	105
May	18.8	28.7	10.3	1.5	76	128
June	16.0	23.9	8.0	–0.4	79	175
July	15.1	22.6	7.3	0.4	75	160
August	16.3	27.8	8.1	1.8	69	129
September	18.6	34.3	9.4	2.6	57	152
October	21.8	39.0	11.3	5.2	51	105
November	24.8	41.4	13.8	6.6	33	107
December	27.0	42.0	15.5	8.0	28	69
Year	*22.1*	*44.2*	*12.1*	*–0.4*	*585*	*882*

Climatological Data, West Terrace, Adelaide[(a)]

Other Conditions

Month	Mean daily sunshine	Clear days (b)	Mean amount of cloud (c)	Amount of evaporation (d)	Vapour pressure 9 a.m.	Mean barometric pressure (e)
Years of record	95	58	107	12	108	121
	hours	No.		mm	mb	mb
January	10.0	12.4	3.1	254	11.9	1,013.2
February	9.3	10.9	3.3	216	12.5	1,014.3
March	7.9	10.9	3.5	176	12.0	1,017.2
April	6.0	6.6	4.5	120	11.5	1,019.9
May	4.8	4.6	5.1	79	10.8	1,020.1
June	4.2	4.0	5.3	56	10.0	1,019.9
July	4.3	3.6	5.2	60	9.5	1,020.0
August	5.3	4.9	4.9	78	9.7	1,019.0
September	6.2	5.7	4.6	110	10.0	1,017.7
October	7.2	5.7	4.5	164	10.2	1,016.0
November	8.6	6.6	4.2	196	10.5	1,015.0
December	9.4	9.0	3.7	241	11.3	1,013.3
Year	*6.9*	*85.0*	*4.3*	*1,751*	*10.8*	*1,017.1*

(a) West Terrace data is longest term data available. *(b)* With less than two–eighths cloud. *(c)* Scale 0 (clear) to 8 (overcast) at 9 a.m. and 3 p.m. daily. *(d)* From Class A Pan (period 1967–1977). *(e)* Mean of 9 a.m. and 3 p.m. readings corrected to sea level.

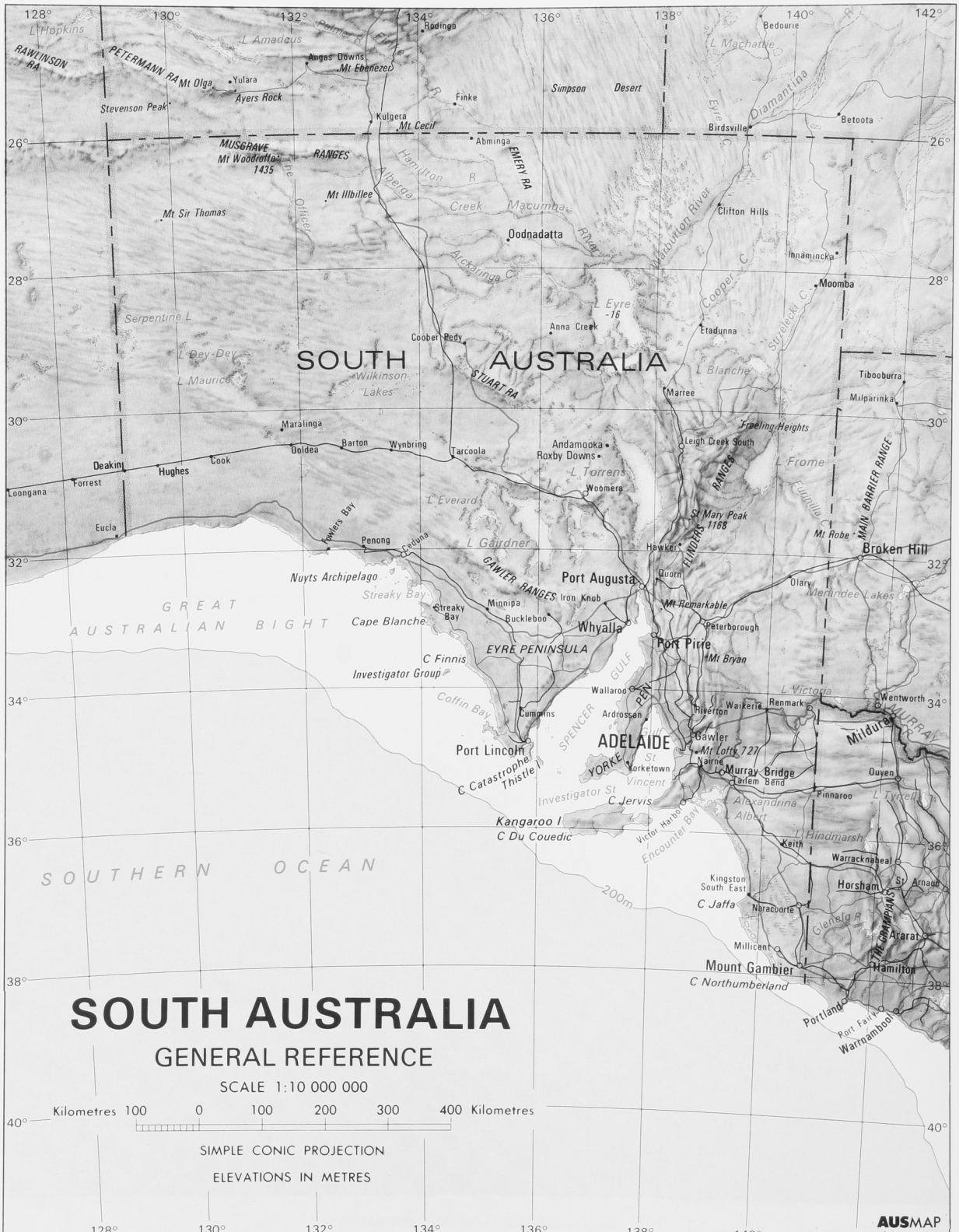
Wind

The prevailing wind during the day in summer is south–easterly with a south–westerly sea–breeze. During summer evenings another common wind, known locally as the 'Gully Wind', blows from the east across the Adelaide Hills. These winds can be very strong and gusty at times. In winter the prevailing wind is north–westerly with a high proportion of south–westerlies.

Humidity

Relative humidity in Adelaide is at its lowest in January when the average 9 a.m. reading (which approximates the average for the whole 24 hours) is 41 per cent. This low value alleviates the stress associated with heat waves in Adelaide. In fact, the relative humidity is very low for most months of the year, only becoming higher in winter, with the average at 9 a.m. reaching 75 per cent in June.

South Australian Tourism Commission


SOUTH AUSTRALIA
SOUTH AUSTRALIA
GENERAL REFERENCE
SCALE 1:10 000 000
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SIMPLE CONIC PROJECTION
ELEVATIONS IN METRES
AUSMAP
92/035
Adelaide
Port Augusta
Whyalla
Port Pirie
Port Lincoln
Mount Gambier
Broken Hill
Murray Bridge
Mildura
Horsham
Naracoorte
Millicent
Warracknabeal
Renmark
Berri
Loxton
Waikerie
Barmera
Peterborough
Quorn
Hawker
Leigh Creek South
Coober Pedy
Oodnadatta
Marree
Andamooka
Roxby Downs
Woomera
Tarcoola
Ceduna
Penong
Streaky Bay
Minnipa
Buckleboo
Cummins
Ardrossan
Wallaroo
Kadina
Moonta
Maitland
Yorketown
Edithburgh
Port Vincent
Stansbury
Normanville
Victor Harbor
Goolwa
Meningie
Tailem Bend
Murray Bridge
Nairne
Mount Barker
Strathalbyn
Callington
Gawler
Two Wells
Mallala
Balaklava
Clare
Burra
Kapunda
Eudunda
Robertstown
Blyth
Snowtown
Jamestown
Orroroo
Carrieton
Hallett
Peterborough
Yunta
Broken Hill
Olary
Manunda
Cockburn
Pinnaroo
Lameroo
Parilla
Geranium
Karoonda
Coonalpyn
Tintinara
Keith
Bordertown
Wolseley
Kingston South East
Robe
Beachport
Millicent
Penola
Kalangadoo
Mount Gambier
Port Fairy
Portland
Warrnambool
Hamilton
Ararat
Stawell
St Arnaud
Wentworth
Ouyen
Underbool
Murrayville
Nhill
Kaniva
Serviceton
Dimboola
Jeparit
Rainbow
Lubeck
Manangatang
Robinvale
Swan Hill
Kerang
Cohuna
Koondrook
Echuca
Deniliquin
Hay
Balranald
Mildura
Wentworth
Broken Hill
Olary
Manunda
Cockburn
Yunta
Peterborough
Orroroo
Carrieton
Hallett
Jamestown
Snowtown
Blyth
Kapunda
Eudunda
Robertstown
Burra
Clare
Gawler
Two Wells
Mallala
Balaklava
Nuyts Archipelago
Streaky Bay
GREAT AUSTRALIAN BIGHT
Cape Blanche
C Finnis
Investigator Group
Coffin Bay
EYRE PENINSULA
Port Lincoln
C Catastrophe
Thistle I
Kangaroo I
C Du Couedic
SOUTHERN OCEAN
200m
C Jaffa
C Jervis
C Northumberland
Encounter Bay
Victor Harbor
Investigator Strait
Spencer Gulf
Yorke Pen
Lake Eyre
Lake Frome
Lake Torrens
Lake Gairdner
Lake Everard
Lake Blanche
Lake Victoria
Lake Hindmarsh
Lake Albert
Lake Alexandrina
Lake Tyrrell
Lake Machattie
Lake Amadeus
Lake Hopkins
Lake Mackay
Lake Macumba
Lake Serpentine
Lake Dey-Dey
Lake Maurice
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Lake Torrens
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Lake Hopkins
Lake Mackay
Lake Macumba
Lake Serpentine
Lake Dey-Dey
Lake Maurice
Lake Wilkinson
Lake Everard
Lake Gairdner

Chapter 2

HISTORY AND CHRONOLOGY

1627 The first recorded sighting of the South Australian coast by Europeans, when Dutch ship *Gulden Zeepaard* examined the coastline from Cape Leeuwin to the islands of St Francis and St Peter in the far west of South Australia.

1792 The next recorded sighting of South Australia made by the French explorer Rear Admiral D'Entrecasteaux while searching for the lost French explorer La Perouse. In December he sighted land south of Cape Leeuwin and examined the cliffs of the Great Australian Bight.

1800 Lieutenant James Grant was the first British explorer to sail along the South Australian coast. He sighted the extreme easterly shores of South Australia and named Cape Banks, Cape Northumberland, Mount Schank and Mount Gambier.

1802 Matthew Flinders in the *Investigator* thoroughly explored the coast of South Australian waters between Nuyts Archipelago and Encounter Bay. He discovered the Gulfs and Central Highlands and reported a very promising country for settlement.

1804 – 1836 A number of further discoveries took place at various parts of South Australian coastline by Captains Dillon (1815–16), Gould (1827–28), Hart (1831–33), and Jones (1833–34).

1829 While imprisoned in Newgate Gaol, Edward Gibbon Wakefield produced a number of writings including the now famous *A Letter from Sydney* series which contained his radical ideas for the colonisation of South Australia.

1830 Captain Charles Sturt explored the River Murray from New South Wales to its mouth; traversed Lake Alexandrina and located the Goolwa Channel, reaching the western shore of the Murray mouth on 12 February.

1833 Charles Sturt's *Two Expeditions into the Interior of Southern Australia* was published. This glowing report of South Australia was welcomed by those in England seeking a suitable site to establish a colony where the Wakefield Plan could be applied without restriction.

1834 The South Australian Colonisation Act was assented to on 15 August. The territory allotted under the Act embraced 802,508 square kilometres, with the western boundary the 132nd meridian of east longitude and the other boundaries virtually as they are today. The colony was to be opened to settlement by British subjects, but under no condition were convicts to be admitted, making South Australia the only State to be settled entirely by free persons.

1836 First migrants landed at Kangaroo Island on 27 July. First South Australian newspaper published in London. Colony's first school opened on Kangaroo Island. The Surveyor-General, Colonel Light arrived in November and commenced survey of Adelaide. Governor Hindmarsh arrived in HMS *Buffalo* and proclaimed South Australia a Province on 28 December.

1837 Colonel Light completed survey of Adelaide and designed the city's present layout. First Adelaide land allotments made. First newspaper published in South Australia. South Australian Supreme Court established. First hospital opened on North Terrace, Adelaide.

1838 First overland cattle and sheep drives from New South Wales. First export from South Australia, a small clip of wool, dispatched. First German settlers under the leadership of Pastor Kavel arrived in South Australia. Formation of first police force.

1839 Colonel Light died at Thebarton and buried in Light Square. First road in South Australia built between Adelaide and Port Adelaide. Adelaide Chamber of Commerce founded.

1840 Eyre started overland journey to Western Australia. The Municipality of Adelaide incorporated, the first in Australia. McLaren Wharf, Port Adelaide, opened by Governor Gawler.

1841 First South Australian mine (silver-lead) opened near Glen Osmond. Assisted migration suspended because of depression. Following financial crisis Governor Gawler recalled and succeeded by Governor Grey. Eyre arrived at Albany in Western Australia.

1842 Registration of births, deaths and marriages commenced. Portions of South Australia divided for first time into counties. Copper discovered at Kapunda. Legislative Council constituted. The South Australian Board of Colonisation Commissioners abolished by the British Government.

1843 Agricultural stripper invented by Ridley. A flour mill built at Hindmarsh.

1844 First Colonial Census held, and showed a population of 17,366.

1845 Copper discovered at Burra. Sturt explored the north-eastern part of the State. Gold found in South Australia, near Montacute. Assisted migration resumed.

1846 First pastoral leases granted.

1847 First winery in the Barossa Valley commenced operation. St Peters College established.

1848 Opening of The Savings Bank of South Australia. First ferry across the River Murray commenced operations at Wellington.

1849 The Central Board of Main Roads established.

1850 An Act granting representative government to South Australia passed by the British Parliament.

1851 The Central Board of Education established.

1852 First overland gold escort arrived in Adelaide.

1853 W.R. Randell's *Mary Ann* and Francis Cadell's *Lady Augusta* initiated the navigation of the River Murray.

1854 State's first railway (horse-drawn) built from Goolwa to Port Elliot.

1855 First South Australian postage stamps issued.

1856 First telegraph line opened from Adelaide to Port Adelaide. The new Constitution Act embodying the principle of responsible government proclaimed; it provided for Parliament to consist of two Houses; a Legislative Council and a House of Assembly. First steam railway from Adelaide to Port Adelaide constructed. Population of the State passed 100,000.

1857 Railway to Smithfield and Gawler opened.

1858 The Real Property Act, which embodied the principles of conveyancing formulated by Torrens, came into operation. First telegraph line to Melbourne opened.

1859 A jetty over 350 metres in length constructed at Glenelg. Copper discovered at Wallaroo.

1860 Water supplied to the City of Adelaide by means of a main connected with the reservoir at Thorndon Park.

1861 Copper discovered at Moonta. Water laid on to houses in Adelaide. John McDouall Stuart set out to cross the continent from south to north. The South Australian boundary shifted west to coincide with the boundary of Western Australia.

1862 Stuart reached Chambers Bay on the coast of the Northern Territory.

1863 Administration of the Northern Territory taken over by South Australia. Shops of Adelaide lit for the first time with gas.

1865 Annual leases of pastoral lands sold by auction for first time. The Bank of Adelaide founded.

1866 Camels introduced by Sir Thomas Elder for the purpose of exploration. The Adelaide Town Hall opened.

1867 Visit of H.R.H. Prince Alfred, Duke of Edinburgh, who laid the foundation stone of the General Post Office.

1869 Foundation stone of St Peters Cathedral laid. Prince Alfred College opened. Adelaide Chamber of Manufacturers founded.

1870 Construction of the transcontinental telegraph from Port Darwin commenced. John Forrest and party made first of two journeys of exploration from Perth.

1872 Transcontinental telegraph from Port Darwin completed and first direct telegram from London received.

1873 Eight-hour working day adopted. First Health Act, establishing a Central Board of Health, passed. First official cricket match played on Adelaide Oval.

1874 The University of Adelaide founded.

1875 The State Education Act passed. First Forestry Board established.

1876 Telegraph communication with New Zealand established. The Smith brothers invented the 'stump jump' plough. South Australia became first State to give legal recognition to trade unions.

1877 Overland telegraph line from Port Augusta to Eucla completed and first telegram from Perth transmitted. The Adelaide Bridge completed.

1878 Provisions of the Education Act relating to compulsory school attendance brought into force in the Adelaide school district. First tramway (horse-drawn) in any Australian city commenced carrying passengers to Kensington and North Adelaide. The State's population passed 250,000.

1879 Foundation stone of the University of Adelaide laid. First bridge across River Murray in South Australia opened at Murray Bridge.

1881 First reclamation of swamp areas of River Murray. Art Gallery opened by H.R.H. Prince Albert Victor. Construction of the weir which created the Torrens Lake completed.

1882 Fire Brigades Board established.

1883 The Telephone Exchange commenced operations. Roseworthy Agricultural College opened to students.

1884 Largs Bay Fort opened. Adelaide Trades and Labor Council, the first delegates society, inaugurated.

1885 Broken Hill silver mines opened. Column erected on Mount Lofty summit as a prominent landmark for mariners.

1887 Act authorising payment to members of Parliament passed. Renmark Irrigation Colony established. First express trains ran between Adelaide and Melbourne. The Jubilee Exhibition opened. Stock Exchange of Adelaide formed by amalgamation of Adelaide Stock Exchange and Stock Exchange of South Australia.

1888 Totalisator legally authorised by an Act of Parliament.

1889 The School of Mines and Industries opened. Smelting of silver-lead ore from Broken Hill commenced at Port Pirie.

1890 First South Australian built locomotive completed.

1892 Education made free to the compulsory age.

1894 Act granting the franchise to women passed. Inauguration of industrial arbitration by the establishment of Boards of Conciliation.

1896 State Bank of South Australia opened. Women voted for the first time at the general election. Happy Valley Reservoir opened. One of Adelaide's most severe droughts commenced, and continued for several years.

1899 Second referendum concerning the establishment of Federation held. In South Australia, 65,990 electors voted for Federation and 17,053 against. First military contingent left South Australia for the Boer War.

1900 Adelaide lit for the first time with electric light. The Commonwealth of Australia Constitution Act received Royal Assent and a Proclamation was issued uniting the States as the Commonwealth of Australia from 1 January 1901. Conservatorium of Music opened. First Workmens Compensation Act passed.

1901 Early closing of shops introduced. First Commonwealth Parliament elected. The Duke and Duchess of York arrived in the *Ophir*. The Customs Act came into force. The Electric Light Works was opened. Iron Knob connected to Whyalla by railway.

1902 Flinders column, at Mount Lofty, dedicated to the public by the Governor, Lord Tennyson.

1905 First kindergarten in South Australia opened.

1906 Military cadet system inaugurated.

1907 High schools were established in a number of country centres. Municipal Tramways Trust incorporated. First Federal basic wage judgment – the 'Harvester' award – made.

1908 Penny savings bank accounts for children established. The Outer Harbor opened. Adelaide High School established.

1909 Adelaide electric tramways commenced operations. Payment of age pensions by the Commonwealth Government commenced.

1910 Payment of invalid pensions by the Commonwealth Government commenced. First recorded monoplane flight in Australia made by F.C. Custance at Bolivar.

1911 'Penny Postage' to all parts of the British Empire introduced. The Federal Defence Act came into operation. Administration of the Northern Territory transferred to the Commonwealth Government.

1913 Medical inspection of school children introduced. Commonwealth Bank formally opened. Metropolitan Abattoirs established.

1914 First South Australian military expeditionary force embarked at Outer Harbor. South Australia experienced its most severe drought.

1915 Prices of commodities fixed by a commission. A referendum approved the closing of liquor bars at 6 p.m. Women appointed as justices of the peace for the first time. First shipment of iron ore made from Whyalla to steelworks in Newcastle. First women police appointed. Opal discovered at Coober Pedy.

1916 Referendum proposing compulsory military service abroad defeated. First Public Service Commissioner appointed. First State living wage with general application declared.

1917 German private schools in South Australia were closed. East-West transcontinental railway completed and the first train ran to Perth. Mr R.G. Carey, in a Bleriot 60, made the State's first airmail flight from Enfield to Gawler.

1919 Captain Butler flew from Adelaide across Gulf St Vincent carrying air mail to Minlaton. Soldier Settlement Bill passed by the South Australian Parliament. First Lord Mayor of Adelaide elected.

1920 Sir Ross Smith and party arrived at Adelaide by non-stop flight from Melbourne. Peace Exhibition held at the Jubilee Exhibition buildings. H.R.H. Edward, Prince of Wales visited South Australia.

1921 The State's population passed 500,000.

1922 First lock on the River Murray completed and opened at Blanchetown.

1923 The Government approved an extensive re-organisation of the railway system.

1924 Public Debt Commissioners were appointed. Air mail between Adelaide and Sydney inaugurated. Waite Agricultural Research Institute established. First radio stations commenced broadcasting.

1925 Showgrounds at Wayville opened. The first Federal election at which voting was compulsory took place. Foundation stone of Adelaide Teachers Training College laid.

1926 The South Australian barley exhibit won all prizes at the Brewers Exhibition in London. The State Bank opened for general banking business. Construction of a narrow gauge railway from Oodnadatta to Alice Springs approved. State petrol tax declared invalid following a Commonwealth Government writ against the State.

1927 Extension of the North-South railway commenced. The first train arrived at Renmark following the opening of the Paringa Bridge. The Duke and Duchess of York arrived in South Australia.

1929 The first air mail left Adelaide for Perth. The first train to Alice Springs left Adelaide. Compulsory military training abolished and replaced by a voluntary system. Electric tram service to Glenelg commenced.

1930 All officers of the South Australian public service over the age of sixty–five years were compulsorily retired. The South Australian basic wage was reduced by 18c to $1.25 a day. Transport Control Board, State Finance Committee and Unemployed Relief Council established.

1931 City Bridge opened. Financial Plan formulated at the Premiers' Conference adopted and Financial Emergency Act passed. Federal basic wage reduced by 10 per cent for twelve months but was to be adjusted in accordance with a retail price index. State basic wage reduced from $1.25 to $1.05 a day. Basic wage for females reduced, first from $3.95 to $3.50 and later to $3.15 a week.

1932 Boundaries and names of a number of local government areas changed and others abolished following the report of a commission.

1933 The Farmers Assistance Board, the Betting Control Board and the Metropolitan and Export Abattoirs Board established.

1934 Water restrictions in force from May until the following January.

1935 The Nomenclature Act of 1935 restored the former German names to a number of towns, the names of which had been changed in 1917.

1936 Centenary year of the State's foundation celebrated. Contract signed for the completion of Parliament House and the foundation stone laid by the Governor, Sir Winston Dugan.

1937 South Australian Housing Trust established. New Federal basic wage of $7.40 per week, which incorporated a 'prosperity' loading, declared. First trolley bus service inaugurated. Mount Bold Reservoir with a capacity of 30,000 megalitres filled, almost doubling Adelaide's water storage. Schools closed and other precautions taken as a result of an epidemic of poliomyelitis.

1938 First South Australian Housing Trust dwelling completed.

1939 State's worst heat wave and disastrous bushfires experienced during the first two months of the year. Record high temperature of 47.6°C recorded in Adelaide. New Parliament House opened by His Excellency the Governor-General, Lord Gowrie.

1940 Goolwa Barrage completed at a cost of $1,400,000. Birkenhead Bridge opened. A rapid development of secondary industry took place as munition annexes were added to existing factories and new factories were opened.

1941 Scriptural instruction in State schools commenced. First naval vessel built in South Australia launched. First blast furnace to be built at Whyalla went into operation. Child endowment payments inaugurated. Payroll tax commenced.

1942 Daylight saving of one hour introduced for almost three months. Wages and prices pegged and profits and interest rates restricted. Racing and bookmaking prohibited. Rationing of tea and clothing commenced. Widows pension instituted. The uniform Income Tax Act came into force. First coal obtained from Leigh Creek.

1943 Price stabilisation legislation came into force. Butter rationing commenced. Wage and price subsidies were introduced and the prices of tea, potatoes and other commodities were reduced in order to bring price indexes and wages to a lower level. Racing resumed but betting shops remained closed.

1944 Rationing of meat began. Morgan–Whyalla pipeline officially opened. The first State election with compulsory voting took place. Severe water restrictions imposed. First output of Leigh Creek coal for electricity generation.

1945 Unemployment and sickness benefits came into operation. Restrictions imposed on the use of gas and electricity for domestic and industrial purposes.

1946 Commonwealth Government munition factories leased to various private firms. Payment of government subsidies to hospitals commenced. Restrictions on the use of gas and electricity again imposed. The Electricity Trust of South Australia took over the property and functions of the Adelaide Electric Supply Company.

1947 Fruit fly detected in metropolitan orchards and efforts made to eliminate it by stripping gardens and orchards. Sugar rationing abolished. Conciliation commissioners appointed following an amendment to the Federal Conciliation and Arbitration Act. Severe restrictions imposed on imports from North America.

1948 Restrictions on the use of gas and electricity imposed on a number of occasions during the year because of the shortage of coal. Preparation of the Woomera rocket range commenced. Forty–hour working week introduced by Arbitration Court award. Serious bushfires occurred in January. Severe storms during April resulted in widespread damage including the destruction of the Glenelg jetty. The free medicine scheme came into operation. Clothing and meat rationing abolished. Full scale production of the 'Holden' car commenced.

1949 Petrol rationing by the Commonwealth Government declared illegal but resumed later in the year under a State Act. An extended national coal strike occurred. Water pipeline to the Woomera rocket range completed. The Commonwealth and South Australian Governments ratified an agreement for the standardisation of railway gauges.

1950 Petrol, butter and tea rationing discontinued. Federal free drugs scheme came into operation. Water restrictions imposed in December and remained in force until June 1951.

1951 Serious bushfires occurred in January. Wool prices reached a record high level. Distribution of free milk to school children introduced.

1952 The hospital benefits scheme came into operation. Price control on clothing removed in South Australia. Severe import restrictions gazetted. Installations for the bulk handling of grain opened at Ardrossan. Compulsory chest X–rays introduced.

1953 Remaining controls on building removed. Port Pirie became the first country town to be proclaimed a city. The medical benefits scheme came into operation. Automatic quarterly cost-of-living adjustments to the basic wage discontinued. Size of the State Cabinet increased from six to eight Ministers.

1954 A severe earthquake occurred in Adelaide on 1 March. Her Majesty Queen Elizabeth II visited South Australia. First unit of Port Augusta power station opened. Construction of dwellings in Elizabeth commenced. Water from the River Murray pumped into metropolitan reservoirs through the Mannum pipeline.

1955 Adelaide Airport at West Beach opened. The new satellite town at Elizabeth officially opened.

1956 River Murray flooded for several months and caused considerable damage in irrigation and reclaimed areas. Town Planning Committee established. Atomic device exploded at Maralinga. Salk Poliomyelitis vaccination program commenced.

1957 Centenary of responsible government in South Australia celebrated. Long service leave legislation passed by the South Australian Parliament.

1958 Visit of Queen Elizabeth, the Queen Mother, to South Australia. Introduction of parking meters to Adelaide. South Para Reservoir opened and connected to Adelaide water supply. Final run by a street tram in Adelaide, following conversion to diesel bus transport.

1959 South Australia ceased to be a claimant State for special grants from Grants Commission. Full-scale television transmission commenced. Sir Thomas Playford created record term as Premier in a British country (26 years 125 days). Aboriginals became eligible for age, invalid and widows pensions.

1960 First Adelaide Festival of Arts held (March 12–26). Completion of second unit and formal opening of Thomas Playford power station at Port Augusta.

1961 First United Kingdom Trade Commissioner appointed to South Australia. Compulsory driving tests introduced. The trailer ship Troubridge made its first run from Port Adelaide to Kingscote and Port Lincoln. Sturt's Desert Pea declared State's official floral emblem.

1962 Myponga Reservoir completed and linked to Happy Valley Reservoir. Duplication of Morgan–Whyalla pipeline commenced.

1963 Population of the State passed 1,000,000 mark. Port Stanvac oil refinery 'on stream'. School leaving age increased to fifteen years. Three weeks annual leave for employees governed by State awards and determinations introduced. First direct dialling for an overseas telephone call from South Australia. Major gas flow from Gidgealpa No. 2 well. Royal visit by Her Majesty, Queen Elizabeth II.

1964 Work commenced on conversion of Port Pirie–Broken Hill railway to standard gauge. First gas from Port Stanvac refinery piped for use in Adelaide's gas supply. Record wind gust (148 km/h) registered at Adelaide on 12 July. New world land speed record set by Donald Campbell on Lake Eyre.

1965 Election of first Labor State Government since 1933. First country television station opened at Port Pirie. Steel works including a basic oxygen steel making plant opened at Whyalla. First woman judge in Australia appointed to Supreme Court of South Australia. Size of the State Cabinet increased from eight to nine Ministers.

1966 Women sworn in for jury service for the first time. The Flinders University of South Australia at Bedford Park officially opened by Her Majesty Queen Elizabeth, the Queen Mother. New outlet tunnel 2,700 metres long from Happy Valley Reservoir completed. ELDO rocket *Europa–1* launched at Woomera.

1967 Totalisator Agency Board operated off-course in South Australia for the first time. First South Australian lottery drawn. Federal Basic Wage superseded by Total Wage concept. Liquor trading hours extended to 10 p.m. WRESAT–1, first Australian orbital satellite launched from Woomera. New record low annual rainfall for Adelaide (257 mm). Torrens Island power station commenced operations. First off-shore drilling rig – *Ocean Digger* – constructed and launched at Whyalla.

1968 State Elections held. Labor Government returned but subsequently defeated on the floor of the House at the first meeting of the new Parliament. New Liberal Premier, R.S. Hall sworn in. Four weeks leave for State Government employees introduced. Sealed highway from Broken Hill to Adelaide opened. Sir James Harrison first Australian-born Governor of South Australia sworn in.

1969 Work begun on second major pipeline to bring River Murray water to Adelaide. Electricity Trust signed $120 million contract for supply of natural gas. Natural gas flowed through completed 832 kilometre pipeline from Moomba–Gidgealpa to Adelaide.

1970 Abortion law reformed in South Australia. First direct telecast from England to Australia via satellite. Hairy-nosed wombat adopted as State's faunal emblem.

1971 Fluoridation of Adelaide water supply commenced. Age of majority reduced from twenty–one to eighteen. Commonwealth Government transferred power to levy payroll tax to the States. Daylight saving introduced in South Australia for the first time since the 1939–45 War. Death of SA Governor Sir James Harrison in office. Sir Mark Oliphant, the first SA born Governor, sworn in. Wearing of seat belts in motor vehicles made compulsory.

1972 New Stirling to Verdun freeway opened. New laws regulating door-to-door selling and used car dealing introduced. University of Adelaide's educational radio station VL5UV commenced broadcasting. Weather temperature reports changed to degrees Celsius. Daylight saving re-introduced for 1972–73 and subsequent summers. South Australian Film Corporation commenced operation. South Australia's first ombudsman appointed.

1973 New long service leave provision for three months leave after ten years service came into force. New $11 million hospital opened at Modbury. Dunstan ALP Government returned at State election to become the first ALP Government to retain office after a general election in South Australia since 1910. Cross Lotto game introduced by State Lotteries Commission. Adelaide Festival Theatre opened by the Prime Minister. Legislation enacted for adult franchise and proportional representation for the Legislative Council. Compulsory blood tests for road accident victims introduced. $50 note issued for the first time.

1974 World Gliding Championships held at Waikerie. H.R.H. Prince Philip, the Duke of Edinburgh, visited South Australia. First match held at the new South Australian National Football League headquarters at West Lakes. Conversion of road signs to metric measurements undertaken. Judgment handed down making four weeks annual leave standard for workers under State awards. Legislation allowing hotel trading to 12 midnight on Fridays and Saturdays came into force.

1975 Transmission of television in colour commenced. International Equestrian Exposition 1975 held in Adelaide and attended by H.R.H. Princess Anne. State Election held on 12 July, after the Legislative Council failed to pass the Railways (Transfer Agreement) Bill; the Dunstan ALP Government was returned with a reduced majority and the Bill was subsequently passed. Medibank commenced operations in South Australia. Legislation for the redistribution of House of Assembly electoral boundaries passed by the Legislative Council.

1976 A new commercial radio station (5AA) went to air, Adelaide's first for forty–six years. A new political party, the New Liberal Movement formed. Sir Douglas Nicholls appointed as Governor of South Australia from 1 December 1976. A total eclipse of the sun occurred in parts of South Australia on 23 October. Large deposits of copper ore discovered at Roxby Downs near Andamooka. Legislation passed making rape within marriage a criminal offence. Capital punishment abolished in South Australia.

1977 Her Majesty, Queen Elizabeth II and the Duke of Edinburgh visited South Australia. $5.8 million Southern Plaza at the Adelaide Festival Centre officially opened by Her Majesty, Queen Elizabeth II. South Australia's first million dollar lottery, the Celebration Lottery, drawn by the Lotteries Commission. A major deposit of sub-bituminous coal discovered near Lock. The South Australian Health Commission came into operation. Keith Seaman sworn in as the new Governor of South Australia. Adelaide first water filtration plant at Hope Valley commenced operations. Late night shopping in city and suburbs commenced.

1978 A Royal Commission held into the dismissal of Police Commissioner Salisbury. The last ship to be built at Whyalla shipyards, the *Denis O'Malley*, was launched. Adelaide tramways held centenary celebrations. Lotteries Commission introduced Instant Money Game with prizes of up to $10,000. South Australian Heritage Committee was formed.

1979 A new public transport zone-fare system introduced. D.A. Dunstan, the State's second longest serving Premier resigned for health reasons. Adelaide's unemployment levels highest in Australia in March – 8.9 per cent of the workforce. Santos legislation passed, limiting maximum permissible single shareholdings to 15 per cent. State elections held; D.O. Tonkin, new Liberal Premier, sworn in. Merger of Bank of Adelaide with ANZ Banking Group approved. Charles Moore retail group ceased operating in South Australia.

1980 Norwood by-election, ordered by Court of Disputed Returns, won by ALP candidate G. Crafter. Bushfire destroyed thirty–five houses in Adelaide Hills, causing $6 million damage. First of State Transport Authority's new 'Series 2000' railcars began service. Mitsubishi Motor Corporation purchased control of Chrysler Australia Ltd. New slogan 'The Festival State' for South Australian motor vehicle number-plates. Constitutional Museum opened. H.R.H. Princess Alexandra and her husband, Mr Angus Ogilvy, visited South Australia. The Tarcoola–Alice Springs rail link opened.

1981 By-election for Federal seat of Boothby, made vacant by the appointment of Mr J. McLeay as Consul-General in Los Angeles, won by Mr R. Steele Hall (Liberal). On February 15, Adelaide had its hottest day since 1948. Temperature reached 43.4°C. H.R.H. Charles, Prince of Wales visited South Australia. On June 1, Adelaide recorded its lowest barometric pressure ever (979 millibars).

1982 Commencement of Moomba–Stony Point liquids pipeline. An Australian register of ships established. Lt-Gen. Sir Donald Dunstan, KBE, CB, sworn in as the State's new Governor, in April. Mr Mario Feleppa, AM, endorsed to fill a casual vacancy in the Legislative Council, became the first Italian-born migrant to enter the South Australian Parliament. On June 8, Adelaide experienced its coldest minimum temperature since the Bureau of Meteorology began taking records in 1857; –0.4°C. Following amendments to the Licensing Act, some hotels in 'tourist areas' began trading on Sundays, for one or two 2–hour periods. State elections held; J.C. Bannon, new Labor Premier sworn in. International air services commenced through Adelaide.

1983 First twins born in South Australia under Queen Elizabeth Hospital's *in vitro* fertilisation program. Large bushfires in February claimed 28 lives in South Australia. Damage estimated at over $200 million. Fires at nine separate locations, including Clare, Adelaide Hills, and South-East. Adelaide recorded its lowest maximum March daytime temperature, 14.9°C (on March 22) for 104 years. The State was visited by H.R.H. Charles, Prince of Wales, and the Princess of Wales. Mrs Wendy Chapman was elected Adelaide's first woman Lord Mayor. Liquids pipeline from Moomba to Port Bonython completed.

1984 Maralinga Land Rights Bill was passed by State Parliament, returning 76,000 square kilometres of South Australia's Far North to the traditional Aboriginal owners. Australian National's new Adelaide Rail Passenger Terminal at Keswick began operating. Australia's new $100 note and $1 coin released for the first time. State Bank and Savings Bank of South Australia amalgamated. Snow fell in the Mount Lofty Ranges, in the Mid North, and at Peterborough.

1985 The Adelaide Station and Environs Redevelopment (ASER) Property Trust continued construction on the site of the old railway station yards. The Trust is building a 400–room international hotel, a convention centre, a new office block and two parking stations. ASER is also a partner in the company which operates the casino established in the station building. Australian Formula One Grand Prix motor race (in Adelaide's East Parklands) won by Keke Rosberg of Finland, driving a 'Williams'. Bannon Government re-elected in December. State Government appointed Australia's first Commissioner for the Ageing.

1986 Jubilee Celebrations, commemorating the 150th Anniversary of European settlement, began on New Year's Eve. Visit of Her Majesty Queen Elizabeth II and Duke of Edinburgh. Adelaide Festival of Arts held in March. Sixth World Three Day Equestrian Event Championships held at Gawler in May. Pope John Paul II visited the State. South Australian Maritime Museum in Port Adelaide opened in December.

1987 The River Murray Commission replaced by the Murray Darling Commission. Entry fees to Belair and Para Vista National Parks introduced. Work commenced on the Botanical Gardens tropical conservatory. Daylight saving started one week later and finished in line with eastern States. Grand Prix held in November. Tall ships visited Port Adelaide in December en-route to Hobart. A substantial part of the submarine construction contract for RAN was awarded to South Australia.

1988 Large bushfire in January burnt out 70 per cent of Wilpena Pound. World Fireball Championship held at Glenelg. By-election for Federal seat of Adelaide, made vacant by resignation of Mr C. Hurford, was won by Mr M. Pratt (Liberal). The State was visited by H.R.H. Charles, Prince of Wales, and the Princess of Wales. Festival of Arts held in March. Red-light cameras installed at selected traffic light sites. Mitsubishi Motors Australia Ltd commenced exports of Magna motor car to Japan. $2 coin issued for the first time. A Poll Merino ram sold for $188,000, a world record price for the breed. East End Market closed down – replaced by a new market complex at Pooraka. The Australia's first hospitality industry training hotel, the College Arms, opened. Police Air Wing facility opened at Adelaide Airport.

1989 A new apprenticeship scheme, the Retail Traineeship Scheme, launched. Approval given for stage one of the Wilpena Pound tourist resort development in the Flinders Ranges. Construction began of a new major metropolitan hospital at Noarlunga. National Crime Authority Office opened in Adelaide. Natural gas supplied to Whyalla and the town's BHP steelworks. Highest rainfall ever in South Australia in one day (273 mm) recorded at Motpena Station near Flinders Ranges National Park. Extensive flooding in the north of the State during March. Lakes Eyre and Torrens filled, Lake Torrens for the first time this century. The Adelaide Childrens Hospital and Queen Victoria Hospital amalgamated to become the Adelaide Medical Centre for Women and Children. Australian Formula One Grand Prix won by Thierry Boutsen, driving a 'Williams'. Following the State Government election, ALP formed a minority Government with the help of two independents. Submarine fleet manufacturing facilities opened at Osborne. Botanic Gardens tropical conservatory opened in November.

1990 Festival of Arts held in March. Club Keno, the world's only on–line computer generated Keno game commenced. Free travel on STA scheduled services for children and students introduced. A new $1.3 million pipe organ was unveiled in the Adelaide Town Hall. Exhibition Hall, the final stage of the Adelaide Plaza on North Terrace was opened. Adelaide recommended as a preferred site for the Multi Function Polis (MFP) by the MFP Joint Steering Committee. Department of Local Government was abolished. The five–millionth Holden rolled off Elizabeth's production line. Police introduced radar speed cameras.

1991 University of South Australia formed by merging South Australian Institute of Technology and three Colleges of Advanced Education. Electoral reform referendum held in February, approved by 89.9 per cent of voters. Dame Roma Mitchell, AC, DBE, sworn in as new Governor. The Flinders University of South Australia celebrated its Silver Jubilee. Commonwealth Government gave go–ahead for Australia's first Multi Function Polis. New system of water and sewerage rates introduced. The $40 million Adelaide Entertainment Centre opened in July.

1992 The Hackney Bus Depot site to be developed by the Botanic Gardens in a way which will complement the Bicentennial Conservatory. Australia's last remaining metropolitan afternoon newspaper, Adelaide's *The News*, closed. The Police Commissioner reported a drop of 15 per cent in housebreaking and car theft and a drop of 10 per cent in larceny. This is attributed to crime prevention initiatives such as Neighbourhood Watch. The Hanson Centre for Cancer Research was officially opened. The University of Adelaide commercial precinct opened. Its aim is to give commercial enterprises access to research and to develop new industries. The South Australian Certificate of Education (SACE) was introduced to replace the previous matriculation system. The oldest rock carvings in the world were discovered in the Olary region 110 kilometres west of Broken Hill. They are 42,700 years old and pre–date the Neanderthal carvings by 15,700 years. The final marker on the 1,500 kilometre Heysen Walking Trail was positioned in October 1992. The trail extends from Cape Jervis on the Fleurieu Peninsula to Mount Babbage in the Upper Flinders Ranges. The wettest year on record with 882.4 millimetres of rain.

1993 Tantanoola's paper pulp mill was opened in February 1993. The mill uses timber from local woodlots. An environmentally friendly oxygen based bleaching method is used instead of the usual chlorine based method. Adelaide hosted 14 per cent of the International Conventions held in Australia in 1992–93. Seagrass from Kingston in the South East Region is being exported to Japan for use in fertiliser manufacture. The 30–year contract removes what was a problem from the beaches in the area. The 888 kilometre border between South Australia and New South Wales has been marked with 223 concrete marker slabs. The 8 year project was completed in June 1993. The first Collins class submarine, *HMAS Collins*, was launched in August 1993. It was built at the Osborne facility of the Australian Submarine Corporation. The design, based on the Swedish Vastergotland class, has been adapted for Australian conditions and can accommodate women crew members. The Arid Lands Botanic Gardens at Port Augusta was opened in September. The eastern boundary of the 200 hectare site extends into Spencer Gulf and the gardens include coastal and marine vegetation. A long boardwalk protects the fragile environment.

Chapter 3

GOVERNMENT

3.1 SYSTEM OF GOVERNMENT

South Australia is one of the six Australian States (originally constituted by Acts of the Imperial Parliament) which at Federation in 1901 ceded many of their powers on matters of national importance (*e.g.* international affairs and defence) to the Commonwealth of Australia. From time to time other powers on matters of local importance have been delegated to local governing bodies. As a result the people of South Australia are subject to the laws of a three–tier system of government. In addition, statutory powers within specified fields are exercised by certain public corporations such as the State Bank of South Australia, the Electricity Trust of South Australia, the South Australian Housing Trust and the South Australian Meat Corporation.

Both the Commonwealth and the South Australian Parliaments are bicameral; in each the leader of the Government (the Prime Minister of the Commonwealth and the Premier of South Australia) is seated in the Lower House and in each the Upper House has restricted powers concerning money Bills.

Cabinet and Executive Government

Both in the Commonwealth and in South Australia, executive government is based on the system which was evolved in Britain in the eighteenth century and which is generally known as 'cabinet' or 'responsible' government. Its main principles are that the head of the State, Her Majesty the Queen (or her representative, the Governor–General or Governor, acting on her behalf) should perform governmental acts on the advice of her Ministers; that she should choose her principal Ministers of State from members of Parliament belonging to the party or coalition of parties commanding a majority in the popular House; that the Ministry so chosen should be collectively responsible to that House for the government of the State; and that the Ministry should resign if it ceases to command a majority there.

The cabinet system operates chiefly by means of constitutional conventions, customs or understandings and through institutions that do not form part of the legal structure of government at all. The executive power of the Commonwealth is exercisable by the Governor–General and that of South Australia by the Governor, each being advised by an executive council which meets only for formal purposes. The whole policy of a Ministry is, in practice, determined by some or all of the Ministers of State, meeting without the Governor–General or Governor under the chairmanship of the Prime Minister or Premier. This group of Ministers is known as the Cabinet.

The Cabinet

As Ministers are the leaders of the party or parties commanding a majority in the popular House, the Cabinet substantially controls not only the general legislative program of Parliament, but the whole course of Parliamentary proceedings. In effect, though not in form, the Cabinet, by reason of the fact

that all Ministers are members of the Executive Council, is also the dominant element in the executive government of the State. In summoning, proroguing or dissolving Parliament, the Governor–General or the Governor is usually guided by the advice tendered by the Cabinet through the Prime Minister or Premier, although legally the discretion is vested in the Office of the Governor–General or Governor.

Executive Council

The Executive Council is usually presided over by the Governor–General or Governor, the members holding office during the Governor's pleasure. All Ministers of State must be members of the Executive Council. Commonwealth Ministers remain members of the Executive Council on leaving office, but are not summoned to attend its meetings, for it is an essential feature of the cabinet system that attendance should be limited to the Ministers of the day.

Appointment of Ministers

Legally, Ministers hold office during the pleasure of the Governor–General or Governor, but in practice the discretion of the Queen's representative in the choice of Ministers is limited by the conventions on which the Cabinet system rests. When a Ministry resigns it is the custom of the Crown to send for the leader of the party which commands, or is likely to be able to command, a majority in the popular House and to commission that person, as Prime Minister or Premier, to 'form a Ministry' – that is, to nominate other persons to be appointed as Ministers of State and to serve as colleagues in the Cabinet.

3.2 COMMONWEALTH GOVERNMENT

Federation

The Commonwealth of Australia was proclaimed on 1 January 1901 in 'An Act to constitute the Commonwealth of Australia', a statute of the Imperial Parliament, which received Royal Assent in July 1900. The draft Constitution, which was enacted with only minor amendment, had been prepared at intercolonial conferences during 1897, 1898 and 1899, and was accepted at referendums during 1899 by South Australia, New South Wales, Victoria, Queensland and Tasmania, and in 1900 by Western Australia.

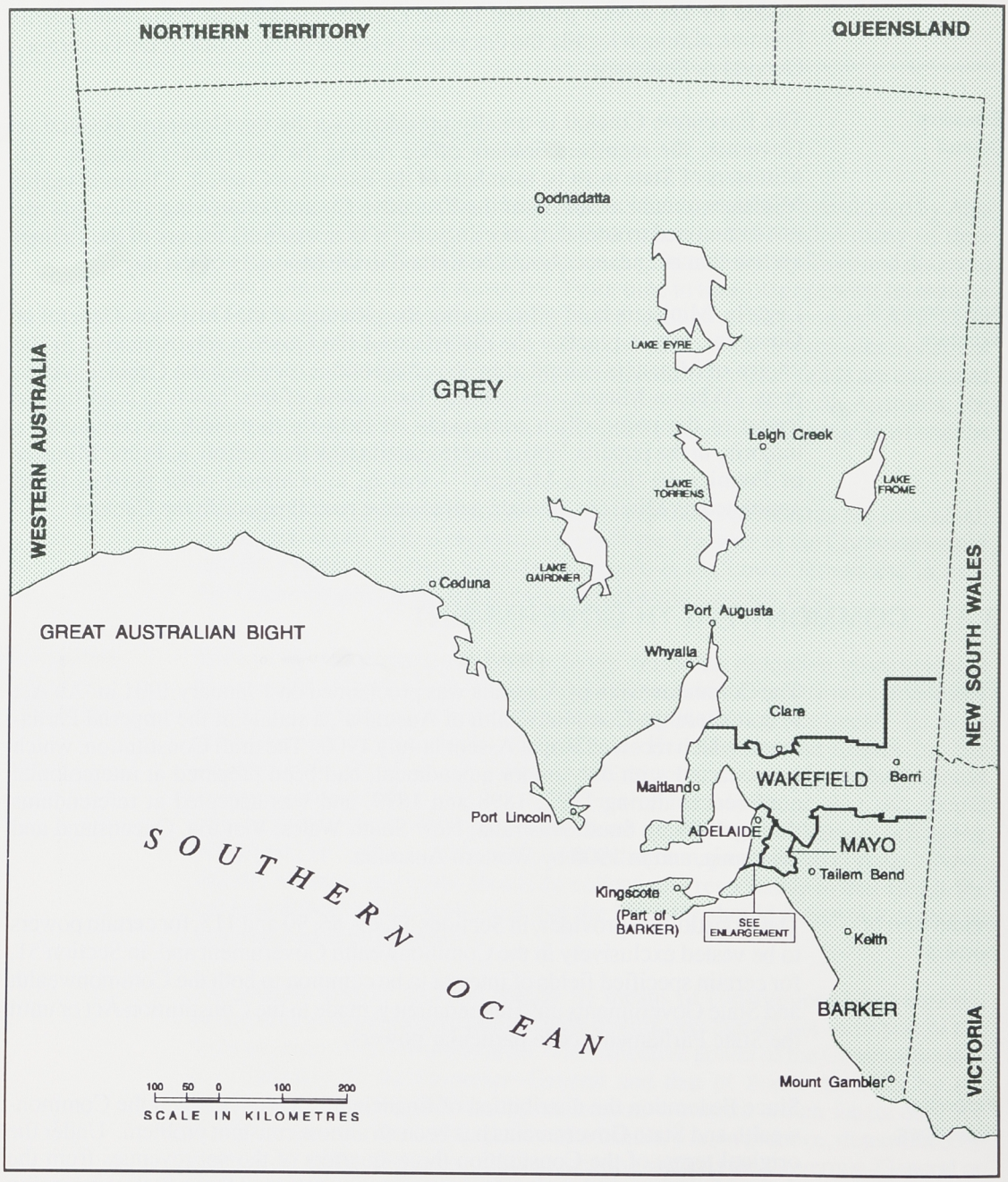
Separation of powers

The Constitution provides, in Sections 52, 69, 86, 90 and 115, for certain powers to be vested exclusively in the Commonwealth Government and, in Section 51, for certain specified fields of interest to be common to both the Commonwealth and State Governments until amendment is made to the Constitution Act or until the State Parliaments cede particular powers.

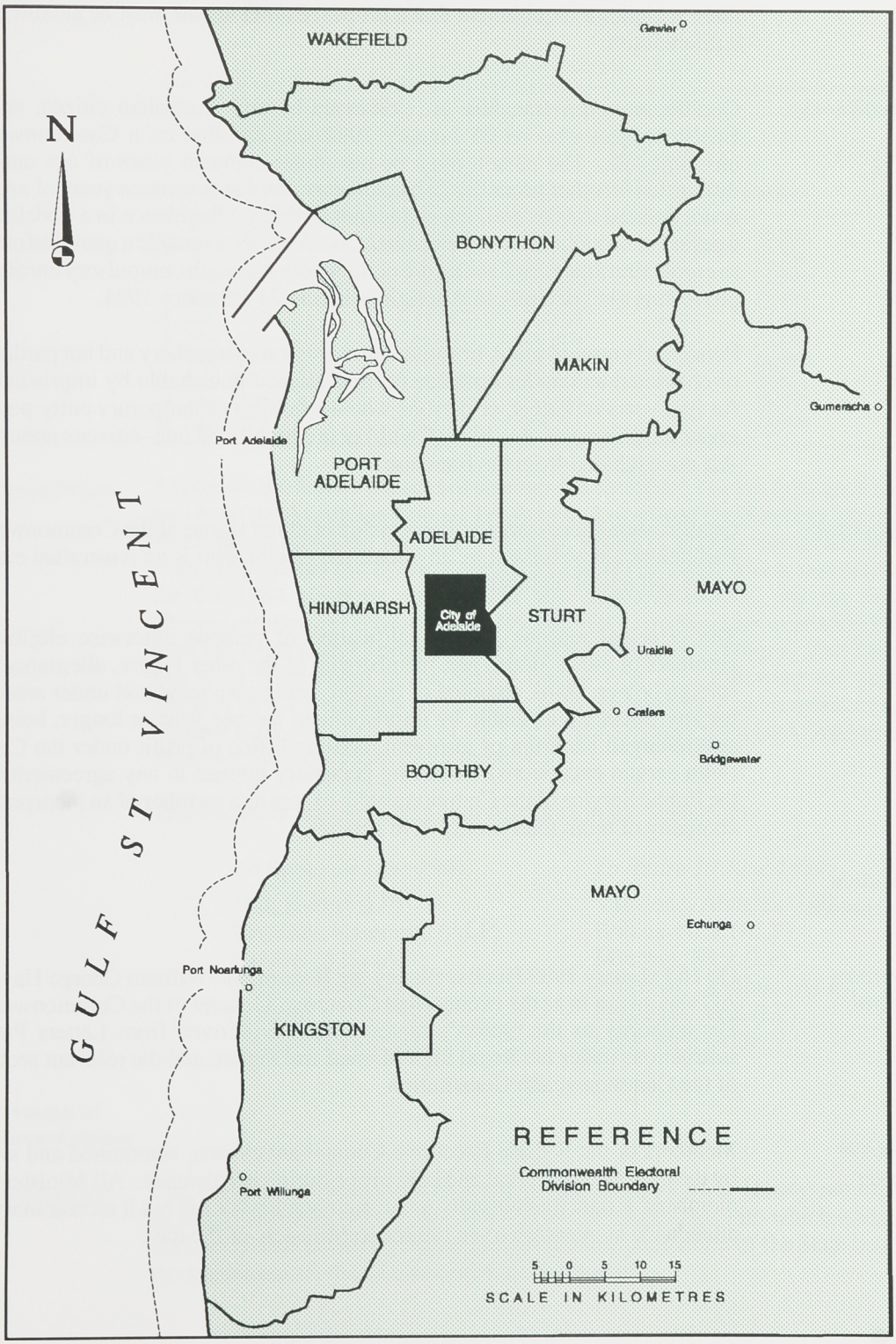
Financial resources

Since Federation the distribution of financial resources between the Commonwealth and State Governments has been an almost constant problem. Under the original terms of the Constitution three–quarters of the net revenues from the duties of customs and excise, for ten years, was returned to the States; provision also existed for general and particular grants to the States. Significant changes have been made in the distribution of financial resources since 1910. These are reviewed in some detail in Chapter 15 Public Finance.

SOUTH AUSTRALIA
COMMONWEALTH ELECTORAL DIVISIONS



PORTION OF SOUTH AUSTRALIA
COMMONWEALTH ELECTORAL DIVISIONS



Commonwealth legislature

The Constitution provides that 'the legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives'. Provision for constitutional amendment includes a requirement that a proposed amendment must be submitted to a referendum.

Franchise

Qualifications for franchise are possessed by any Australian citizen, or any British subject who on 25 January 1984 was enrolled on a Commonwealth electoral roll. The person must be not under eighteen years of age and not disentitled on other grounds. (A person may enrol at seventeen years of age but is not entitled to vote until the eighteenth birthday.) Residence in a division for a period of one month before enrolment, is necessary to enable a qualified person to enrol. Enrolment and voting are compulsory although compulsory enrolment provisions did not apply to Aborigines before 21 February 1984.

Persons of unsound mind, or convicted of treason or treachery and not pardoned, or convicted and under sentence for any offence punishable by imprisonment for five years or longer, or persons who are holders of temporary entry permits under the *Migration Act 1958* (Cwlth) or are prohibited non–citizens under that Act are excluded from the franchise.

Membership

Qualifications necessary for membership of either House of the Commonwealth Parliament are possessed by any qualified elector who is an Australian citizen of the full age of eighteen years.

The principal reasons for disqualification of persons otherwise eligible as members of either House are; membership of the other House, allegiance to a foreign power, being attainted of treason, being convicted and under sentence for any offence punishable by imprisonment for one year or longer, being an undischarged bankrupt or insolvent, holding office of profit under the Crown (with certain exceptions), or having pecuniary interest in any agreement with the Public Service of the Commonwealth except as a member of an incorporated company of more than twenty–five persons.

Executive government

Governor–General

On 16 February 1989 His Excellency the Honourable William George Hayden, AC was sworn in as the twenty–first Governor–General of the Commonwealth. His authority as the Queen's representative is derived from Letters Patent, instructions under the Royal Sign Manual and Signet, and the relevant sections of the Commonwealth Constitution.

Executive Council

Members of the Federal Executive Council are chosen, summoned and sworn by the Governor–General and hold office during his pleasure. All Ministers are members. Councillors usually retain membership for life but it is customary for attendance at meetings to be limited to Ministers of the day.

The Senate

The Senate is the Upper House. Originally it was intended that this House should protect the rights and interests of the States, but with the growth of the parliamentary system of party–line voting, its role has become mainly that of a house of review.

Elections for the Senate : Voting

Date of election	Electors enrolled	Votes recorded		Informal votes	
		Number	Percentage of electors enrolled	Number	Percentage of votes recorded
21 Nov. 1970	639,807	609,268	95.23	42,306	6.94
18 May 1974	750,308	722,434	96.28	82,191	11.38
13 Dec. 1975	789,004	759,369	96.24	75,540	9.95
10 Dec. 1977	824,205	783,669	95.08	81,451	10.39
18 Oct. 1980	849,899	806,695	94.92	70,359	8.72
5 Mar. 1983	880,455	836,699	95.03	73,350	8.77
1 Dec. 1984	906,278	862,369	95.16	46,399	5.38
11 July 1987	942,880	890,556	94.45	33,514	3.76
24 Mar. 1990	966,431	931,561	96.39	23,438	2.52
13 Mar. 1993	1,014,480	968,365	95.45	22,390	2.31

Representation

At present the Senate consists of seventy–six members, twelve from each State, two from the Australian Capital Territory and two from the Northern Territory. The original provision was that each State, voting as a single electorate, should elect six Senators but by the Representation Act of 1983, which was effective for the 1984 elections, the number was raised to twelve. By the *Senate (Representation of Territories) Act 1973* (Cwlth), two Senators were added from both the Australian Capital Territory and the Northern Territory. The Territories were represented in the Senate for the first time following the general election of 13 December 1975. Except in extraordinary circumstances each Senator is elected for a term of six years. Six Senators from each State and all Territory Senators retire every three years.

The members representing South Australia in the Senate are:

To Retire 30 June 1996:	*To Retire 30 June 1999:*
Hill, Robert (LP)	Vanstone, Amanda (LP)
Crowley, Rosemary (ALP)	Bolkus, Nick (ALP)
Coulter, John (AD)	Minchin, Nick (LP)
Teague, Baden (LP)	Foreman, Dominic (ALP)
Schacht, Chris (ALP)	Ferguson, Alan (LP)
Chapman, Grant (LP)	Lees, Meg (AD)

The House of Representatives

Representation

The members of the House of Representatives (the Lower House) are elected in single–member electorates. The number of electorates into which a State is divided is determined by the proportion that the population of the State bears to the population of the Commonwealth as a whole.

The *Commonwealth Electoral Act 1918* (Cwlth) provides for the redrawing of electoral boundaries from time to time. New Commonwealth electoral boundaries for South Australia were drawn in 1992 and came into effect at the 13 March 1993 election. Maps of the new Commonwealth Electoral Divisions have been included in this section.

Section 24 of the Constitution provides that the number of members in the House of Representatives shall be as nearly as possible twice the number of Senators and prescribes the formula to be used, 'until the Parliament otherwise provides', for allocating to each State its share of the available seats but stipulates that no original State shall have less than five members in the House. In addition one member is elected from the Northern Territory and two members are elected from the Australian Capital Territory. Preferential voting is used for elections for the House of Representatives.

Elections for the House of Representatives : Voting

		Votes recorded		*Informal votes*	
Date of election	*Electors enrolled*	*Number*	*Percentage of electors enrolled*	*Number*	*Percentage of votes recorded*
2 Dec. 1972	671,081	644,211	96.00	16,845	2.61
18 May 1974	750,308	722,434	96.28	20,311	2.81
13 Dec. 1975	789,004	759,369	96.24	18,201	2.40
10 Dec. 1977	824,205	783,669	95.08	26,461	3.38
18 Oct. 1980	849,899	806,695	94.92	22,491	2.79
5 Mar. 1983	880,455	836,699	95.03	22,380	2.67
1 Dec. 1984	906,278	859,629	94.85	74,719	8.69
11 July 1987	942,880	884,418	93.80	60,536	6.84
24 Mar. 1990	966,431	927,897	96.01	34,143	3.68
13 Mar. 1993	1,014,400	962,763	94.91	39,088	4.06

Division 3 of the *Commonwealth Electoral Act 1918* (Cwlth) complements Section 24 of the Constitution in determining the level of representation of the States and Territories in the House of Representatives.

House of Representatives, 1993 Election
Voting and Party Representation in South Australian Electorates

			Successful candidates		
Electorate	*Electors on roll*	*Electors voting*	*Name*	*Party*	*First preference votes*
Adelaide	85,484	79,819	Worth, P.M.	LP	34,296
Barker	83,749	80,157	McLachlan, I.M.	LP	46,667
Bonython	77,877	73,693	Blewett, Hon. N.	ALP	38,820
Boothby	85,021	81,002	Hall, Hon. R.S.	LP	41,708
Grey	86,386	81,738	Wakelin, B.H.	LP	34,703
Hindmarsh	88,799	84,046	Gallus, C.A.	LP	38,117
Kingston	82,511	79,092	Bilney, Hon. G.N.	ALP	33,906
Makin	84,984	81,507	Duncan, Hon. P.	ALP	36,748
Mayo	85,924	81,782	Downer, A.J.G.	LP	42,657
Port Adelaide	86,302	81,432	Sawford, R.W.	ALP	41,248
Sturt	82,520	77,333	Pyne, C.M.	LP	29,121
Wakefield	84,843	81,162	Andrew, J.N.	LP	44,503

3.3 GOVERNMENT OF SOUTH AUSTRALIA

The *Constitution Act 1855*, which inaugurated the system of responsible government in South Australia, was passed and came into force on 24 October 1856. A summary of early constitutional history and the introduction of responsible government was included on pages 60–2 of the *South Australian Year Book 1971*.

Vice–regal representation

The Honourable Dame Roma Mitchell, AC, DBE, was sworn in as the Queen's representative in South Australia on 6 February 1991.

The role of the vice–regal representative has changed significantly over the past one hundred and fifty years. When South Australia was founded, the Governor determined matters of policy, made laws and was responsible to the United Kingdom Government for the management of the Colony. In time, policy matters were left increasingly to elected Members of Parliament, self–government was achieved and the Governors links with the United Kingdom Government diminished.

Today, vice–regal approval is still required to give legislation, regulations and appointments the force of law. However, the Governor invariably relies on the advice of Ministers or follows established conventions and does not become involved in political debate.

Following the passage of the Australia Act in 1986 by the Parliaments of the Commonwealth and the United Kingdom at the request of the States, no constitutional links remain between State Governors and the United Kingdom Government.

Nevertheless, the Crown, personified by the Governor, continues to symbolise the ongoing rule of law and the unity of the State, irrespective of the rise and fall of governments. The Governor retains important discretionary powers and is thus enabled to maintain something of a safeguard against malpractice and injustice, particularly in extreme circumstances. The Governor has a responsibility to ensure the maintenance of lawful parliamentary government in South Australia.

The Governor is appointed by the Queen on the advice of the South Australian Premier. Vice–regal authority derives from the South Australian Constitution, the Australia Act, Letters Patent signed by the Queen on the advice of her South Australian Government, and convention. Essentially, the Governor exercises all of the authority of the Sovereign in respect of South Australia. The Governors direct relationship to the Queen, which is independent of that of the Governor–General, reflects the sovereignty of South Australia within the Australian Federation.

The amount appropriated from Consolidated Revenue for the Governors salary for 1991–92 was $63,600. An allowance of $104,100 is used to meet the Governor's expenses in performing her duties. The *Governors' Pensions Act 1976* provides for a pension to be paid to former Governors and to the spouses of deceased Governors.

Governors of South Australia

Name	*Term of Office*	
Captain John Hindmarsh, RN, KH	28 December 1836	16 July 1838
Lt–Col. George Gawler, KH	17 October 1838	15 May 1841
George Grey	15 May 1841	25 October 1845
Lt–Col. Frederick Holt Robe	25 October 1845	2 August 1848
Sir Henry E.F. Young	2 August 1848	20 December 1854
Sir Richard G. MacDonnell, CB	8 June 1855	4 March 1862
Sir Dominick Daly	4 March 1862	19 February 1868
Rt Hon. Sir James Fergusson, Bart	16 February 1869	18 April 1873
Sir Anthony Musgrave, KCMG	9 June 1873	29 January 1877
Lt–Gen. Sir Wm F.D. Jervois, GCMG, CB	2 October 1877	9 January 1883
Sir Wm C.F. Robinson, GCMG	19 February 1883	5 March 1889
Rt Hon. the Earl of Kintore, PC, GCMG	11 April 1889	10 April 1895
Sir Thomas F. Buxton, Bart, GCMG	29 October 1895	29 March 1899
Rt Hon. the Lord Tennyson, KCMG	10 April 1899	17 July 1902
Sir George R. Le Hunte, KCMG	1 July 1903	18 February 1909
Admiral Sir Day Hort Bosanquet, GCVO, KCB	18 February 1909	22 March 1914
Lt–Col. Sir Henry L. Galway, KCMG, DSO	18 April 1914	30 April 1920
Lt–Col. Sir Wm E.G. Archibald Weigall, KCMG	9 June 1920	30 May 1922
Lt–Gen. Sir George T.M. Bridges, KCB, KCMG, DSO	4 December 1922	4 December 1927
Brig.–Gen. the Hon. Sir A.G.A. Hore–Ruthven, VC, KCMG, CB, DSO	14 May 1928	26 April 1934
Maj.–Gen. Sir W.J. Dugan, KCMG, CB, DSO	28 July 1934	23 February 1939
Sir Charles M. Barclay–Harvey, KCMG	12 August 1939	26 April 1944
Lt–Gen. Sir C.W.M. Norrie, KCMG, CB, DSO, MC	19 December 1944	19 June 1952
Air Vice–Marshal Sir Robert A. George, KCMG, KCVO, KBE, CB, MC	23 February 1953	7 March 1960
Lt–Gen. Sir Edric M. Bastyan, KCMG, KCVO, KBE, CB	4 April 1961	1 June 1968
Maj.–Gen. Sir James W. Harrison, KCMG, CB, CBE	4 December 1968	16 September 1971
Sir Mark L. Oliphant, KBE	1 December 1971	30 November 1976
Sir Douglas R. Nicholls, KCVO, OBE	1 December 1976	30 April 1977
Sir Keith D. Seaman, KCVO, OBE	1 September 1977	28 March 1982
Lt–Gen. Sir Donald B. Dunstan, KBE, CB	23 April 1982	5 February 1991
The Hon. Dame Roma Mitchell, AC, DBE	6 February 1991	

The duration of a Governors appointment is indeterminate, but it is expected that he or she will serve for up to five years. The appointment may be extended for a further period.

Pending the appointment of a Governor or, in the event of the Governors absence from the State, or incapacity, the above functions would be performed by the Lieutenant–Governor acting either as Administrator or the Governors Deputy, depending on the circumstances. The present Lieutenant–Governor is Dr Basil Hetzel, AC. If the Lieutenant–Governor were unable to act, the Chief Justice of the Supreme Court usually would become Administrator or Governors Deputy.

Cabinet and Executive Government

In South Australia every Minister must be a member of either the Legislative Council or the House of Assembly. All Ministers are members of the Cabinet and all Ministers are *ex officio* members of the Executive Council. Although the Governor may, subject to any law enacted by the Legislature, appoint other persons to the Executive Council, membership is in practice limited to Ministers of the day.

The maximum number of Ministers has been varied from time to time. In 1856 the number was five; in 1873, six; 1901, four; 1908, six; 1953, eight; 1965, nine; 1970, ten; 1973, eleven; 1975, twelve and 1978, thirteen. In 1908 it was specified that no more than four Ministers were to be in the House of Assembly, but in 1953 this limit was increased to five, in 1965 to six, in 1970 to seven and in 1973 to eight. This restriction on the number of Ministers from the Lower House was removed by the *Constitution Act Amendment Act (No. 2) 1975* and now it is permissible for all Ministers to be selected from the House of Assembly. Since 1978, ten Ministers have been selected from the House of Assembly and three from the Legislative Council.

Cabinet, as such, has no legal powers. Some Cabinet decisions result in the initiation and subsequent enactment of legislation; other decisions become legally binding through ratification by Executive Council or through powers vested in individual Ministers for the administration and control of their respective departments of government. In addition to government departments, statutory authorities also come under some degree of ministerial or parliamentary oversight.

Premiers

Since 1856 the following forty persons have held the office of Premier.

Premiers of South Australia

Names	*Dates of Office*			*Total period in Office* Years	Days
Hon. Boyle T. Finnis	24/10/1856	–	21/8/1857	–	301
Hon. John Baker	21/8/1857	–	1/9/1857	–	11
Hon. Robert R. Torrens	1/9/1857	–	30/9/1857	–	29
Hon. Richard D. Hanson	30/9/1857	–	9/5/1860	2	222
Hon. Thomas Reynolds	9/5/1860	–	8/10/1861	1	152
Hon. G.M. Waterhouse	8/10/1861	–	4/7/1863	1	269
Hon. Francis S. Dutton	4/7/1863	–	15/7/1863;		
	22/3/1865	–	20/9/1865	–	193
Hon. Sir Henry Ayers, KCMG	15/7/1863	–	4/8/1864;		
	20/9/1865	–	23/10/1865;		
	3/5/1867	–	24/9/1868;		
	13/10/1868	–	3/11/1868;		
	22/1/1872	–	22/7/1873	4	35
Hon. Arthur Blyth	4/8/1864	–	22/3/1865;		
	10/11/1871	–	22/1/1872;		
	22/7/1873	–	3/6/1875	2	254
Hon. John Hart, CMG	23/10/1865	–	28/3/1866;		
	24/9/1868	–	13/10/1868;		
	30/5/1870	–	10/11/1871	1	339
Hon. James P. Boucaut, QC	28/3/1866	–	3/5/1867;		
	3/6/1875	–	6/6/1876;		
	26/10/1877	–	27/9/1878	3	11
Hon. H.B. Strangways	3/11/1868	–	30/5/1870	1	208
Hon. John Colton	6/6/1876	–	26/10/1877;		
	16/6/1884	–	16/6/1885	2	142

Premiers of South Australia *(continued)*

Names	*Dates of Office*			*Total period in Office* Years	Days
Hon. William Morgan	27/9/1878	–	24/6/1881	2	270
Hon. John C. Bray	24/6/1881	–	16/6/1884	2	358
Hon. Sir J.W. Downer, KCMG, QC.	16/6/1885	–	11/6/1887;		
	15/10/1892	–	16/6/1893	2	239
Hon. Thomas Playford	11/6/1887	–	27/6/1889;		
	19/8/1890	–	21/6/1892	3	323
Hon. J.A. Cockburn	27/6/1889	–	19/8/1890	1	53
Hon. F.W. Holder	21/6/1892	–	15/10/1892;		
	8/12/1899	–	15/5/1901	1	274
Rt Hon. C.C. Kingston, QC	16/6/1893	–	1/12/1899	6	168
Hon. V.L. Solomon	1/12/1899	–	8/12/1899	–	7
Hon. J.G. Jenkins	15/5/1901	–	1/3/1905	3	290
Hon. Richard Butler	1/3/1905	–	26/7/1905	–	147
Hon. Thomas Price	26/7/1905	–	5/6/1909	3	314
Hon. A.H. Peake	5/6/1909	–	3/6/1910;		
	17/2/1912	–	3/4/1915;		
	14/7/1917	–	8/4/1920	6	312
Hon. John Verran	3/6/1910	–	17/2/1912	1	259
Hon. Crawford Vaughan	3/4/1915	–	14/7/1917	2	102
Hon. Sir H.N. Barwell, KCMG	8/4/1920	–	16/4/1924	4	8
Hon. John Gunn	16/4/1924	–	28/8/1926	2	134
Hon. Lionel L. Hill	28/8/1926	–	8/4/1927;		
	17/4/1930	–	13/2/1933	3	160
Hon. R.L. Butler	8/4/1927	–	17/4/1930;		
	18/4/1933	–	5/11/1938	8	210
Hon. R.S. Richards	13/2/1933	–	18/4/1933	–	64
Hon. Sir Thomas Playford, GCMG	5/11/1938	–	10/3/1965	26	125
Hon. F.H. Walsh	10/3/1965	–	1/6/1967	2	83
Hon. D.A. Dunstan, QC	1/6/1967	–	17/4/1968;		
	2/6/1970	–	15/2/1979	9	210
Hon. R.S. Hall	17/4/1968	–	2/6/1970	2	47
Hon. J.D. Corcoran	15/2/1979	–	18/9/1979	–	216
Hon. D.O. Tonkin	18/9/1979	–	10/11/1982	3	49
Hon. J.C. Bannon	10/11/1982	–	4/9/1992	9	300
Hon. L.M.F. Arnold	4/9/1992	–			

Parliament

Parliament is summoned, prorogued, or dissolved, by proclamation issued by the Governor. The two Houses of Parliament are the Legislative Council (Upper House) and the House of Assembly (Lower House). The following table gives the dates and the number of House of Assembly sitting days for Parliamentary sessions in recent years.

Parliamentary session	*Period*			*House of Assembly sitting days*
1984–85	2/8/84	–	16/5/85	60
1985	1/8/85	–	7/11/85	31
1986	11/2/86	–	25/3/86	12
1986–87	31/7/86	–	14/4/87	57
1987–88	6/8/87	–	14/4/88	55
1988–89	4/8/88	–	13/4/89	48
1989	3/8/89	–	19/10/89	24
1990	8/2/90	–	11/4/90	21
1990–91	2/8/90	–	11/4/91	56
1991–92	8/8/91	–	6/5/92	58
1992–93	6/8/92	–	6/5/93	62

Voting system

Members of the House of Assembly are elected by secret ballot using the preferential system of voting and counting. In each district the candidate who receives the largest number of first preference votes is elected, provided the number of votes constitutes an absolute majority, that is, more than 50 per cent of the total number of formal votes. If no candidate receives an absolute majority of first preference votes, the second preferences of the candidate who received the fewest first preference votes are distributed to the remaining candidates. The distribution of next available preferences from the candidate with the fewest votes is repeated until a candidate is elected with an absolute majority. Voting for Members of the Legislative Council is also preferential. A system of proportional representation is used for counting votes with the whole State as one multi–member electoral district.

Members, qualifications and privileges

Election to the South Australian Parliament is open to those eligible to vote (*see* page 41). However, under the *Constitution Act 1934–1975*, certain people are not eligible to sit in Parliament, for example, judges, members of the Commonwealth Parliament, holders of certain government contracts and occupants of some offices of profit under the Crown. Members are required to take an oath or make an affirmation of allegiance to the Crown before sitting or voting in Parliament.

Franchise

The franchises for the separate Houses are shown on page 41. South Australia was the first, at the general election of 25 April 1896, of the Australian States to give voting rights to women, and the existence of this provision in this State contributed to the decision to include full adult franchise in proposals for Federation. For the first eighty–five years of responsible government voting for both Houses of Parliament was voluntary, but the Electoral Act Amendment Act of 1942 made voting for the House of Assembly compulsory for persons whose names appear on the House of Assembly Electoral Roll.

Numbers of members and electorates

Alterations made to the number of members and number of electorates for each of the two Houses are shown in the following table.

Members and Electorates

	Legislative Council		*House of Assembly*	
Date	*Members*	*Electorates*	*Members*	*Electorates*
1856	18	1	36	17
1863	18	1	36	18
1875	18	1	46	22
1882	24	4	46	22
1884 *(a)*	24	4	52	26
1890	24	4	54	27
1902	18	4	42	13
1912 *(b)*	18	4	40	12
1915	20	5	46	19
1938	20	5	39	39
1970	20	5	47	47
1975	21	1	47	47
1979	22	1	47	47

(a) Separate representation for Northern Territory. (b) Cession of Northern Territory to Commonwealth Government control.

Functions of Parliament

The function of Parliament is to legislate for the peace, order, and good government of the State. Principal among the tasks of Parliament is the raising of revenue and the appropriation of funds for the development and maintenance of the State through its public services.

Legislation may be initiated by any member in either House except that money Bills must be initiated by Ministers of the Crown in the House of Assembly; the Legislative Council may suggest amendments to money Bills although it may not effect such amendments itself. Most Bills are initiated by the Government as a result of the deliberations of Cabinet. The Opposition and independent members usually confine their activities to examination, criticism, and amendment, of Government measures. Legislation, other than to alter the constitution of either House, may be passed by a simple majority of the votes of the members present.

An alteration to the constitution of either House requires at the second and third readings of the Bill acceptance by a majority of all the members (not only those present or voting) of each House voting separately.

Deadlocks

A deadlock results from the refusal by the Legislative Council to pass the same (or substantially the same) Bill during two consecutive Parliaments, provided that a general election for the House of Assembly has been held between the refusals and that on the second occasion an absolute majority of all the members of the House of Assembly voted in favour of the Bill at its second and third readings. In the event of a deadlock between the Houses, the Governor may proclaim the dissolution of both Houses.

Cost of Parliamentary Government

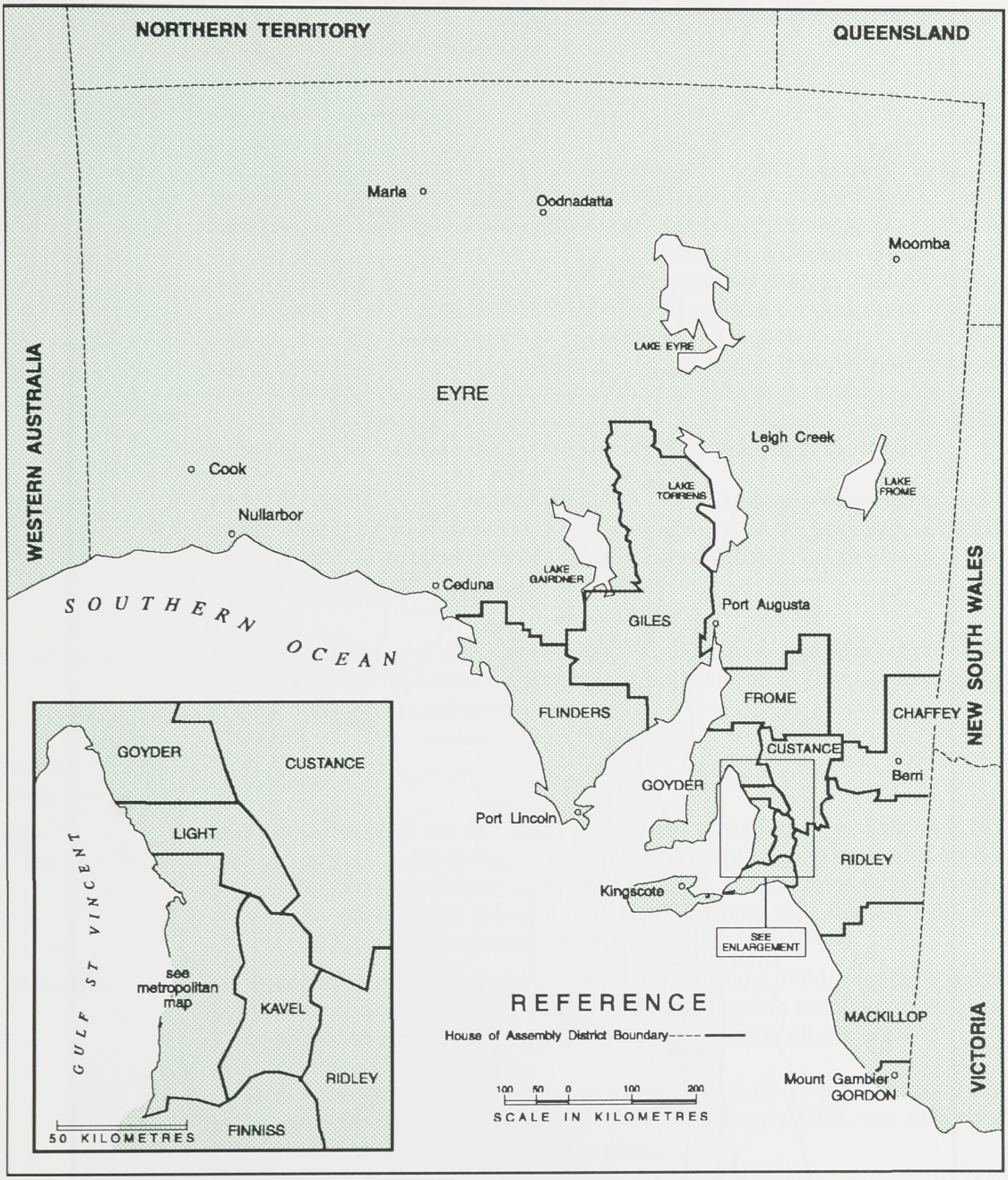
The following table shows, in broad groups, the expenditure incurred in the operation of the parliamentary system in South Australia, comprising the Governor, the Ministry, the Legislative Council, House of Assembly and electoral activities.

Cost of Parliamentary Government
($'000)

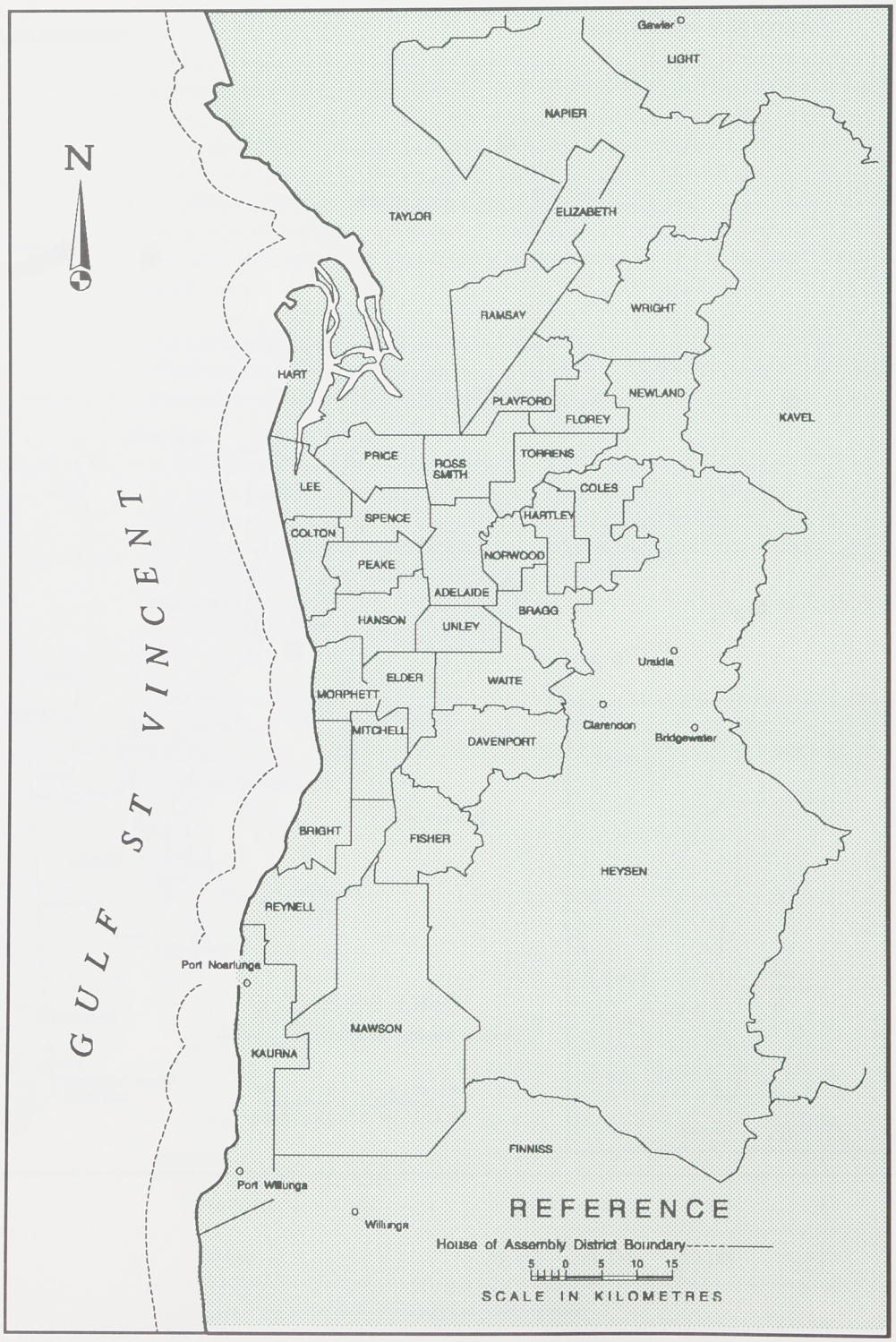
Particulars	*1987–88*	*1988–89*	*1989–90*	*1990–91*	*1991–92*
Governor's establishment	1,138	1,019	1,030	994	1,190
Ministry	1,196	1,293	1,318	1,565	1,725
Parliament:					
Legislative Council *(a)*	2,210	3,056	3,059	3,668	4,152
House of Assembly *(a)*	4,548	6,066	6,029	7,385	8,072
Other *(b)*	10,920	8,350	11,395	12,621	14,030
Total Parliament	*20,013*	*19,783*	*20,484*	*23,674*	*26,254*
Electoral	961	1,519	4,171	4,602	1,779
Royal Commissions, Select Committees etc.	159	231	179	263	257
Total	**21,147**	**21,532**	**27,181**	**31,097**	**31,205**

(a) Allowances to members, travelling and other expenses.
(b) Government contribution to members' superannuation funds, printing, reporting staff, library etc.

SOUTH AUSTRALIA
SOUTH AUSTRALIAN ELECTORAL DISTRICTS



PORTION OF SOUTH AUSTRALIA
SOUTH AUSTRALIAN ELECTORAL DISTRICTS



Life of Parliament

Term of office of each Parliament is four years from the day on which it first meets for the dispatch of business and it may not be prorogued or dissolved by the Governor before the expiration of three years from the day it first met unless the House passes a motion of no confidence in the Government, a Bill of 'special importance' is rejected by the Legislative Council or, the Governor is acting in the settlement of a deadlock.

Legislative Council

Members and electorates

The *Constitution and Electoral Acts Amendment Act 1973*, assented to on 22 November 1973, increased the number of members in the Legislative Council from twenty to twenty–two and reduced the number of electorates to one with the whole State becoming a single electorate with members elected on a proportional representation basis. This amendment did not become fully effective for two general elections as only half the Legislative Councillors retire at each election and eleven members are now elected at each general Legislative Council election. At the general election of 25 November 1989, eleven members were elected to the Legislative Council and at present there are twenty–two members in this House. Casual vacancies are filled by persons chosen at a joint sitting of the members of the Legislative Council and House of Assembly.

Franchise

Under the *Constitution Acts Amendment Act 1973*, all electors whose names were on the House of Assembly electoral roll were included on the Legislative Council electoral roll. Under the *Electoral Act 1985*, voting for the Legislative Council was made compulsory.

President

At the first meeting of the Council in each Parliament the members choose one from among their number to fill the position of President. The person so selected is then entitled to a casting vote only.

House of Assembly

Seat of Government

The Government of the day holds its position as such only so long as it has majority support in the House of Assembly. When it no longer controls such a majority in vital issues, particularly 'money Bills', the Government must resign or go to the polls. Once defeated in the Lower House on a 'money Bill', the Government is unable to finance the administration of the State.

Franchise

An Australian citizen aged eighteen and over, of sound mind, who has lived at his or her present address for at least one month before enrolling to vote for Commonwealth and State elections, is entitled to vote at all elections.

A British citizen who was enrolled on a Commonwealth or State electoral roll at some time between 29 October 1983 and 25 January 1984, and fulfils the other criteria above, is also entitled to vote.

Enrolment for South Australian State elections is not compulsory but, in practice, as there is a joint Commonwealth and State electoral roll, most voters are enrolled for both.

Membership

Subject to the provisos mentioned on page 37, election to the South Australian Parliament is open to those eligible to vote in elections.

Members of the House of Assembly are elected for a maximum of four years. If a seat becomes vacant through the resignation, death or disqualification of a member, it is usually filled at a by–election.

Electoral boundaries

The Electoral Districts Boundaries Commission, established under the *Constitution Act 1934–1975*, comprises a Judge of the Supreme Court, the Electoral Commissioner and the Surveyor–General and is responsible for making periodical adjustments to House of Assembly electoral boundaries in South Australia. The Commission must, before commencing proceedings invite, by advertisement, representations by any person in relation to the redistribution of boundaries.

Boundaries are redrawn with the principles that amongst the population of each electoral district a community of interest exists (*e.g.* social, economic, regional or other kind) and, that the number of electors in each district should not vary from a predetermined quota by more than ten per cent. This quota is calculated by dividing the total number of electors in South Australia by the total number of House of Assembly electoral districts.

The *Constitution (Electoral Redistribution) Amendment Act 1991*, removed a requirement that the Commission should have regard to the desirability of leaving boundaries undisturbed as far as possible. The Act also provides a new criterion for electoral fairness which requires the Commission to ensure, as far as practicable, that a group of candidates which attracts more than fifty per cent of the popular vote will be elected in sufficient numbers to form a government.

The 1991 Electoral Districts Boundaries Commission drew up new boundaries for the 47 House of Assembly seats which will become effective at the next State elections. Maps of the new State Electoral Boundaries are included in this section of the *South Australian Year Book*.

Officers and their functions

Election of a Speaker is the first business when a new Parliament first meets. The Speaker presides over debate, maintains order, represents the House officially, communicates its wishes and resolutions, defends its privileges when necessary, and applies its procedure. The Speaker may exercise a casting vote only. A Chairman of Committees is also elected by the House at the beginning of each Parliament; the Chairman presides over the deliberations of the House in Committee and acts as Deputy Speaker when required. Other officers of the Parliament include the Leader and Deputy Leader of the Opposition in either House and party whips whose function is to ensure that their party members are present in the House for divisions and other important business.

Elections and party representation

The following tables give details of the numbers of electors enrolled and voting in contested electorates for all general elections, and Party representation from 1970 to 1989.

South Australian Parliament : Voting at Elections, 1970 to 1989

Date	Legislative Council — Contested electorates: Electors enrolled	Legislative Council — Contested electorates: Electors voting	Legislative Council — Contested electorates: Per cent	House of Assembly — Contested electorates: Electors enrolled	House of Assembly — Contested electorates: Electors voting	House of Assembly — Contested electorates: Per cent
30 May 1970	..	..	..	635,533	603,952	95.03
10 March 1973	383,758	357,971	93.28	696,290	655,937	94.20
12 July 1975	771,414	719,753	93.30	771,414	721,770	93.56
17 September 1977	..	..	..	818,335	764,072	93.37
15 September 1979	826,586	765,033	92.55	826,586	768,985	93.03
6 November 1982	871,215	808,363	92.79	871,215	811,758	93.18
7 December 1985	905,507	846,250	93.46	905,507	846,289	93.46
25 November 1989	941,368	889,896	94.53	941,368	888,918	94.43

South Australian Parliament : Party Representation at Elections, 1970 to 1989

Date	Legislative Council: ALP	Legislative Council: LP	Legislative Council: Other	House of Assembly: ALP	House of Assembly: LP	House of Assembly: Other
30 May 1970	4	16	–	27	20	–
10 March 1973	6	13	1	26	18	3
12 July 1975	10	9	2	23	20	4
17 September 1977	10	11	–	27	18	2
15 September 1979	10	11	1	19	25	3
6 November 1982	9	11	2	24	21	2
7 December 1985	10	10	2	27	16	4
25 November 1989	10	10	(a)2	(c)22	22	(b)(c)3

(a) Australian Democrats. *(b)* 1 National Party, 2 Independent Labor. *(c)* On 3 February 1992 one ALP member became Independent Labor and representation became 21 *ALP*, 4 *Other*.
ALP Australian Labor Party LP Liberal Party of Australia

At the general election held on 25 November 1989 there were forty–seven electorates represented in the House of Assembly. The table which follows shows the electoral returns for that election.

House of Assembly : Party Representation, 1989

Electorate	Electors on roll	Electors voting	Successful candidate: Name	Successful candidate: Party	Successful candidate: First preference votes
Adelaide	18,802	17,393	Armitage, M.	LP	8,290
Albert Park	21,304	20,190	Hamilton, K.	ALP	10,572
Alexandra	22,125	21,055	Chapman, T. *(a)*	LP	12,200
Baudin	22,364	21,009	Hopgood, D.	ALP	9,809
Bragg	19,907	18,473	Ingerson, G.	LP	11,585
Briggs	19,817	18,770	Rann, M.	ALP	10,112
Bright	21,192	20,304	Matthew, W.	LP	8,911
Chaffey	20,465	18,821	Arnold, P.	LP	10,716
Coles	18,639	17,753	Cashmore, J.	LP	9,851
Custance	18,461	17,545	Olsen, J. *(b)*	LP	10,525
Davenport	19,508	18,460	Evans, S.	LP	10,146
Elizabeth	16,299	15,337	Evans, M.	IND. LABOR	5,884
Eyre	18,106	16,141	Gunn, G.	LP	9,745
Fisher	26,817	25,674	Such, B.	LP	11,653
Flinders	18,316	17,338	Blacker, P.	NP	8,241
Florey	23,348	22,327	Gregory, B.	ALP	9,591
Gilles	17,834	16,993	McKee, C.	ALP	8,177
Goyder	21,774	20,823	Meier, J.	LP	12,641

House of Assembly : Party Representation, 1989 *(continued)*

Electorate	Electors on roll	Electors voting	Successful candidate: Name	Party	First preference votes
Hanson	18,977	17,847	Becker, H.	LP	9,130
Hartley	19,281	18,204	Groom, T.	ALP *(c)*	8,371
Hayward	17,920	17,099	Brindal, M.	LP	7,266
Henley Beach	20,334	19,316	Ferguson, D.	ALP	9,040
Heysen	21,163	19,961	Wotton, D.	LP	11,162
Kavel	22,164	21,179	Goldsworthy, R. *(a)*	LP	11,560
Light	21,909	21,012	Eastick, R.	LP	10,912
Mawson	22,884	21,710	Lenehan, S.	ALP	10,484
Mitcham	19,537	18,212	Baker, S.	LP	9,883
Mitchell	18,576	17,570	Holloway, P.	ALP	8,187
Morphett	18,509	17,323	Oswald, J.	LP	9,364
Mount Gambier	19,685	18,673	Allison, H.	LP	12,394
Murray Mallee	19,977	18,987	Lewis, P.	LP	11,774
Napier	19,075	17,858	Hemmings, T.	ALP	10,300
Newland	22,208	21,295	Kotz, D.	LP	8,989
Norwood	18,772	17,476	Crafter, G.	ALP	7,499
Peake	19,533	18,267	Heron, V.	ALP	8,965
Playford	19,626	18,609	Quirke, J.	ALP	9,244
Price	19,836	18,701	De Laine, M.	ALP	10,813
Ramsay	24,328	22,988	Arnold, L.	ALP	13,369
Ross Smith	18,354	17,327	Bannon, J.	ALP	9,902
Semaphore	19,603	18,525	Peterson, N.	IND. LABOR	7,210
Spence	19,985	18,762	Atkinson, M.	ALP	9,762
Stuart	19,153	18,007	Hutchison, C.	ALP	8,573
Todd	20,293	19,428	Klunder, J.	ALP	8,822
Unley	19,254	17,858	Mayes, K.	ALP	7,662
Victoria	20,125	19,061	Baker, D.	LP	12,892
Walsh	18,480	17,461	Trainer, J.	ALP	8,520
Whyalla	16,749	15,748	Blevins, F.	ALP	7,806

(a) By-elections for the seats of Alexandra and Kavel in May 1992, made vacant by the resignations of Hon. T. Chapman and Hon. R. Goldsworthy, were won by Hon. D.C. Brown (Liberal) and Mr J. Olsen (Liberal) respectively.

(b) By-election for the seat of Custance in June 1990, made vacant by the resignation of Mr J. Olsen, was won by Mr I. Venning (Liberal).

(c) Independent Labor since 3 February 1992.

ALP Australian Labor Party LP Liberal Party of Australia NP National Party
IND. LABOR Independent Labor

The members of the Legislative Council at June 1993 were as follows:

Bruce, Hon. G.L. (ALP)
Burdett, Hon. J.C. (LP)
Crothers, Hon. T. (ALP)
Davis, Hon. L.H. (LP)
Dunn, Hon. H.P.K. (LP)
Elliott, Hon. M.J. (AD)
Feleppa, Hon. M.S. (ALP)
Gilfillan, Hon. I. (AD)
Griffin, Hon. K.T. (LP)
Irwin, Hon. J.C. (ALP)
Laidlaw, Hon. D.V. (LP)
Levy, Hon. J.A.W. (ALP)
Lucas, Hon. R.I. (LP)
Pfitzner, Hon. B. (LP)
Pickles, Hon. C.A. (ALP)
Ritson, Hon. R.J. (LP)
Roberts, Hon. R.R. (ALP)
Roberts, Hon. T.G. (ALP)
Stefani, Hon. J.F. (LP)
Sumner, Hon. C.J. (ALP)
Weatherill, Hon. G. (ALP)
Wiese, Hon. B.J. (ALP)

Referendums

Since the inception of responsible government in South Australia in 1856 nine referendums have been held – the first in 1896 and subsequent ones in 1898, 1899, 1911, 1915, 1965, 1970, 1982 and 1991 – and twelve proposals have been submitted.

Three proposals related to education (1896) of which only one was approved; three were constitutional (1898 and 1899) – all approved; one related to Parliamentary salaries (1911) – not approved; one related to bar–room closing hours (1915) – favoured 6 p.m. closing; one related to the establishment of a lottery (1965) – approved; one related to extended shopping hours in the metropolitan area (1970) – not approved; and one related to daylight saving (1982) – approved. The last referendum, held on 9 February 1991, asked House of Assembly electors 'Do you approve the *Constitution (Electoral Redistribution) Amendment Bill 1991?*'. Of the 882,650 who voted, 649,906 voted 'Yes' and 197,244 voted 'No'.

Overseas representation

South Australia is represented in London by the Agent–General for South Australia, at South Australia House, 50 Strand, London. As official representative of the State, it is the function of the Agent–General to work in close cooperation with the High Commissioner for Australia; to keep the State Government informed of political and economic developments overseas; to promote industrial development and investment in South Australia; to encourage immigration to the State and to foster trade with the United Kingdom and other countries.

State emblems

The State Coat of Arms gazetted on 19 April 1984 replaced an earlier Coat of Arms conferred by King George V in 1936.

The State Flag, which is flown from Government buildings, comprises the Blue Ensign with the State Badge in the fly. The State Badge is a drawing of a Piping Shrike or White Backed Magpie *(Gymnorhina tibicen leuconota)* standing on a staff of a gum tree.

On 23 November 1964, the Government adopted Sturt's Desert Pea *(Swainsona Formosa)* as the Floral Emblem of South Australia and the Hairy–Nosed or Plains Wombat *(Lasiorhinus latifrons)* was adopted as the faunal emblem of the State on 27 August 1970.

Opal was adopted as the gemstone emblem on 15 August 1985.

The official colours of South Australia are Red, Blue and Gold.

3.4 PUBLIC CORPORATIONS

A public corporation is defined, for statistical purposes, as a body (other than a local government authority or body whose receipts and payments are included in the public accounts of the Commonwealth, a State, or a Territory) created by or under legislation to carry out an activity or activities on behalf of a government, or a body in which a government has a controlling interest.

Most public corporations have independent powers for the recruitment of staff. All possess greater administrative and financial autonomy than government departments but there is a wide variation in the degree of autonomy accorded, in various aspects, to different authorities.

Activities carried out by public corporations include tertiary education, hospital services, power supply, public transport, banking services, fire control, irrigation and drainage in rural areas, control and regulation of milk supply, slaughtering of animals for human consumption, housing development, off–course totalisators and lotteries, and investigation of problems relating to the development of mineral resources.

In appropriate parts of this Year Book reference is made to the activities of most of the public corporations which operate in South Australia.

3.5 LOCAL GOVERNMENT AUTHORITIES

At 30 June 1992, there were 119 local government authorities in South Australia. Each local government area is controlled by a Council consisting of members elected by residents and property owners and exercising powers under the *Local Government Act 1934*.

While around 99 per cent of the State's population resides within the 119 incorporated areas, only 15 per cent of the State is covered by them – the remaining parts are served by the Outback Areas Community Development Trust.

Boundaries

Local government areas are defined by proclaimed boundaries. Changes to boundaries can be initiated by proposals of the councils affected, or by 10 per cent or more of electors in the council areas affected, or by 25 per cent or more of electors in the parts of the council areas affected. Panels constituted by the Local Government Association of South Australia oversee the preparation of reports on proposals and consultation with local communities. The panels also make recommendations as to whether proposals should be carried into effect. Polls of local electors must be held in respect of recommendations about proposals if 10 per cent or more of electors petition within a fixed period.

Most council areas contain wards which are essentially electoral districts. Ward boundaries are also defined by proclamation and must be reviewed at least every seven years to ensure that electors are adequately and fairly represented.

Functions

Broadly speaking the role of councils is to act as:

- an elected accountable decision maker for the local community. This can include educating, informing and leading the community in issues that have local impact.
- a provider, coordinator and information disseminator for facilities, programs and services at a local level;
- an upholder of standards set down in legislation *e.g.* the Building and Planning Act;
- a catalyst, facilitator and coordinator of local effort and organiser for external resources (*i.e.* grants); and
- an advocate and representative for the local community to other governments and the wider society.

There are more than 45 Acts of State Parliament which prescribe the powers and authorities which each council exercises in the management of its area. The *Local Government Act 1934* is the major legislation which affects local government. It prescribes the structure of councils, the timing and running of meetings, the voting procedures at local government elections, how councils can raise income and allocate their funds. Each council is constituted as a corporate body.

Each council provides different services to meet the needs of their communities. Providing these services is part of the council's duty of representing and making decisions for the community.

The most common services councils provide are libraries, road and footpath building and maintenance, environmental health services, traffic control, street lighting, street signs, street seats and trees, litter bins, public toilets, community halls, town planning, building and planning approvals, rubbish collection, aged care workers, citizenship ceremonies, information provision, parking inspection, dog control, maintenance of foreshores and jetties, playgrounds, playing fields and recreation parks.

Services which are provided by some councils, depending on local needs and circumstances include recycling, swimming pools, child care, aged housing, electricity supply, immunisation, maintenance of cemeteries and community buses. Beyond this councils may, if they wish, provide other services and facilities.

Membership

The local government electorate is represented by a council whose membership comprises a mayor or chairman, aldermen and councillors. The mayor or chairman is the principal member of the council. A mayor is elected by the area as a whole while a chairman is chosen from among the members of the council. The Mayor of the City of Adelaide is entitled to be called Lord Mayor. Aldermen are the representatives of the area as a whole and there may not be more aldermen than half the number of councillors. Councillors are elected by the electors of the area as representatives of the area as a whole, where there are no wards. In the case where wards exist, councillors are elected by the electors of those wards.

Persons are eligible to nominate for local government office if they are an elector for the area, provided that they are not an undischarged bankrupt, liable to imprisonment, disqualified from holding public office, or an officer or employee of the council. Furthermore, members of other councils and persons who have nominated for offices in other councils are also ineligible. A person elected to the office of mayor or alderman must have been a member of a council for at least twelve months.

A member of council receives an annual allowance for expenses and reimbursement and other prescribed expenses. The allowances are fixed at the first meeting after an election and may not be less than $480 per annum or more than $1,975 per annum.

A person of or above the age of majority may vote if he or she is an elector in the area for the House of Assembly, lives in the area and has lodged a declaration with the council, or is a ratepayer by virtue of being the sole owner or occupier of rateable property. A body corporate may be enrolled as an elector if it is a ratepayer by virtue of being the sole owner of rateable property. A group of persons is able to vote if all the members are ratepayers in respect of rateable property within the area, the members are joint owners or occupiers of the rateable property, and at least one member is not enrolled on the relevant voters role.

Chapter 4

POPULATION

4.1 POPULATION ESTIMATES AND PROJECTIONS

Methods of estimating the population in a given area depend on the use to which such measures are to be put and the availability of information on which to base those estimates. Before 1971, the main measure of the population of South Australia was the census count. Since 1971, figures have been compiled on the basis of the estimated resident population of the State. The estimated resident population for Census dates is derived by adding estimates of Australians temporarily overseas and estimates of census under–enumeration to the count of persons at their usual place of residence.

Measures of the estimated mean (average) resident population for a period are generally used when calculating rates (*e.g.* crude birth rates) for a period. Projections of estimates of future populations are based on sets of assumptions about population trends, and are important in forecasting and planning.

The following table shows the number of persons in South Australia as counted by censuses to 1966 and the estimated resident population at census dates from 1971.

Population[(a)]

				Average annual increase	
Census date	*Males*	*Females*	*Persons*	*Number*	*Per cent*
1844 26 February	9,686	7,680	17,366	..	..
1846 26 February	12,670	9,720	22,390	2,512	14.47
1851 1 January	35,302	28,398	63,700	8,262	36.90
1855 31 March	43,720	42,101	85,821	5,530	8.68
1861 8 April	65,048	61,782	126,830	6,835	7.96
1866 26 March	85,334	78,118	163,452	7,324	5.78
1871 2 April	95,236	90,189	185,425	4,395	2.69
1876 26 March	109,841	102,687	212,528	5,421	2.92
1881 3 April	145,113	130,231	275,344	12,563	5.91
1891 5 April	161,920	153,292	315,212	3,987	1.45
1901 31 March	180,485	177,861	358,346	4,313	1.37
1911 3 April	207,358	201,200	408,558	5,021	1.40
1921 4 April	248,267	246,893	495,160	8,660	2.12
1933 30 June	290,962	289,987	580,949	7,149	1.44
1947 30 June	320,031	326,042	646,073	4,652	0.80
1954 30 June	403,903	393,191	797,094	21,574	3.34
1961 30 June	490,225	479,115	969,340	24,607	3.09
1966 30 June	550,196	544,788	1,094,984	25,129	2.59
1971 30 June *(b)*	597,572	602,542	1,200,114	..	..
1976 30 June	635,152	638,918	1,274,070	14,791	1.23
1981 30 June	653,940	664,829	1,318,769	8,940	0.70
1986 30 June	687,764	694,786	1,382,550	12,756	0.97
1991 30 June	717,622	728,677	1,446,299	12,750	0.92

(a) Excludes full–blood Aborigines before the 1966 Census. *(b)* Estimated resident population from 1971.

The count of persons in South Australia (excluding Aborigines) had reached 17,366 persons at the first census on 26 February 1844. In 1861, twenty–five years after the first settlers arrived, the count was 126,830 and this figure had more than doubled by the Census in 1881. By 1921 the Census counted almost half a million persons and the population of South Australia was estimated to have reached a million in January 1963.

The population at 6 August 1991 was estimated to be 1,447,400 persons. Population projections indicate that South Australia's population will reach one and a half million in the mid–1990s.

Between population censuses the number of persons is estimated by adding to the Census estimated resident population the recorded natural increase, net overseas migration gain and interstate movement involving a change in usual residence.

The estimated resident population for South Australia at 31 December 1992 was 724,200 males, 734,800 females, giving a total of 1,459,000 persons.

Increases in the Estimated Resident Population

Year ended 30 June	*Males*	*Females*	*Persons*	*Natural increase*	*Total increase*	*Rate of growth*
1987	692,400	700,400	1,392,800	9,051	10,214	0.74
1988	697,700	707,200	1,404,900	8,489	12,145	0.87
1989	704,400	714,600	1,419,000	8,664	14,120	1.01
1990	710,700	721,400	1,432,100	8,253	13,027	0.92
1991	717,600	728,700	1,446,300	8,767	14,243	0.99
1992 p.....	722,900	733,500	1,456,400	8,264	10,125	0.70

The estimated mean resident population for South Australia is calculated for the years ended 30 June and 31 December and these estimates are shown below.

Estimated Mean Resident Population

	Year ended 30 June			*Year ended 31 December*		
Year	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
1987	690,000	697,600	1,387,600	692,500	700,600	1,393,100
1988	695,100	704,000	1,399,100	697,900	707,500	1,405,400
1989	701,400	711,200	1,412,600	704,500	714,700	1,419,200
1990	707,500	718,100	1,425,600	710,800	721,600	1,432,400
1991	714,200	725,100	1,439,300	717,600	728,600	1,446,200
1992 p.....	720,600	731,400	1,452,000	722,700	733,400	1,456,100

The following table of intercensal population growth rates shows the effects of some important aspects of the development of the State, namely:

(a) the net migration, especially of males, away from South Australia following the mineral discoveries in other States in the 1880s and early 1890s;

(b) the slow growth during the economic depression of the 1930s when natural increase fell to a particularly low level; and

(c) the high rate of migration in the post 1939–45 War period up to 1960.

The State's rate of population increase was slower than the Australian rate in every period from 1881 to 1947. From 1947 the steep rise in the rate of net migration enabled an above–average growth rate to be achieved and this was maintained until 1966. Since 1966 however, the State's growth rate has been generally below the Australian rate.

Intercensal Compound Annual Population Growth Rates
South Australia and Australia, 1861–1991(a)

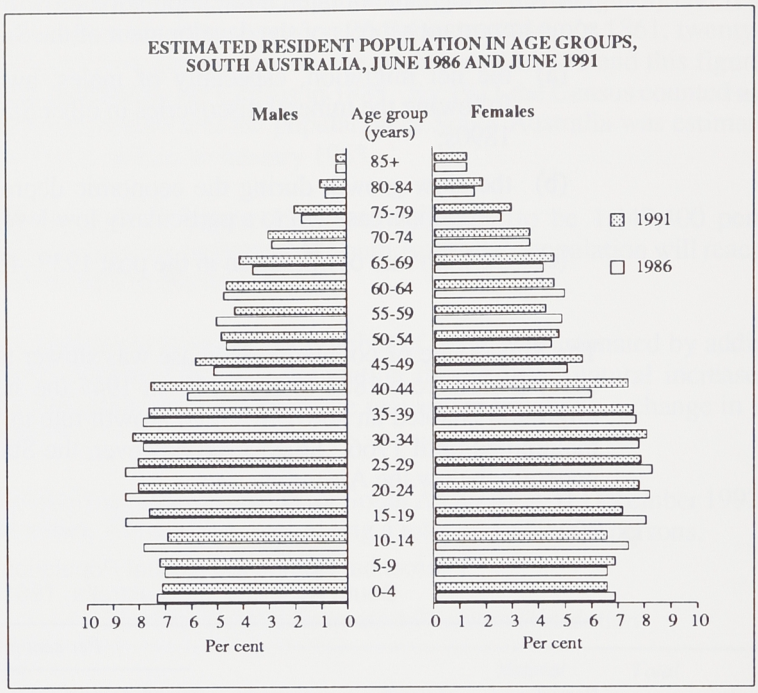
	Per cent growth rate per annum	
Period	*South Australia (b)*	*Australia*
1861–71	3.88	n.a.
1871–81	4.03	n.a.
1881–91	1.36	3.51
1891–1901	1.29	1.74
1901–11	1.32	1.67
1911–21	1.94	2.01
1921–33	1.32	1.65
1933–47	0.76	0.96
1947–54	3.05	2.46
1954–61	2.83	2.26
1961–66	2.47	2.00
1966–71	1.85	2.41
1971–76	1.20	1.44
1976–81	0.69	1.24
1981–86	0.95	1.43
1986–91	0.91	1.53

(a) Estimated resident population from 1971. *(b)* Includes Northern Territory before 1881.

Age distribution

Details of the age distribution of the population are of particular importance because they reveal changes which have occurred over time in the age structure and supply basic material for the calculation of fertility, mortality and annuity rates and the probabilities of survival.

The population pyramid demonstrates the ageing of the South Australian population. The median age of the estimated resident population has increased from 32.0 years at 30 June 1986 to 33.9 years at 30 June 1991. In 1971 the median age was 27.5 years.



Geographical distribution

The Australian Standard Geographical Classification divides the State into seven statistical divisions. Each of these is further divided into statistical subdivisions which consist of a number of statistical local areas.

In South Australia the statistical local areas are the same as local government areas with the exception of Enfield which is divided into two statistical local areas. Estimated resident populations for these areas are prepared annually. However, the data shown in this section are census counts at place of enumeration *i.e.* where people were on Census night. The Census counts for these areas in 1981, 1986 and 1991 are shown in the following tables.

Census Counts of Statistical Divisions and Subdivisions[(a)]

	Persons at Census date		
Statistical Division and Subdivision	*1981*	*1986*	*1991*
Adelaide:			
Northern	270,169	288,398	311,176
Western	207,311	208,393	206,143
Eastern	206,863	210,057	212,019
Southern	246,931	270,873	294,259
Total Adelaide	*931,274*	*977,721*	*1,023,597*
Outer Adelaide:			
Barossa	28,507	32,357	36,969
Kangaroo Island	3,515	3,923	3,902
Onkaparinga	18,385	21,715	24,948
Fleurieu	16,788	20,210	23,432
Total Outer Adelaide	*67,195*	*78,205*	*89,251*

Census Counts of Statistical Divisions and Subdivisions[(a)] *(continued)*

Statistical Division and Subdivision	*Persons at Census date*		
	1981	*1986*	*1991*
Yorke and Lower North:			
Yorke	21,365	22,830	23,148
Lower North	18,232	18,800	18,706
Total Yorke and Lower North	*39,597*	*41,630*	*41,854*
Murray Lands:			
Riverland	32,089	33,096	34,218
Murray Mallee	29,249	30,274	31,061
Total Murray Lands	*61,338*	*63,370*	*65,279*
South East:			
Upper South East	18,871	18,805	18,471
Lower South East	40,148	41,446	41,364
Total South East	*59,019*	*60,251*	*59,835*
Eyre:			
Lincoln	26,255	26,935	25,604
West Coast	6,891	6,709	6,364
Total Eyre	*33,146*	*33,644*	*31,968*
Northern:			
Whyalla	31,410	27,746	26,240
Pirie	28,511	27,431	26,948
Flinders Ranges	23,896	23,947	22,857
Far North	8,696	9,715	12,274
Total Northern	*92,513*	*88,839*	*88,319*
Migratory	951	2,284	519
Total State *(b)*	**1,285,033**	**1,345,945**	**1,400,622**

(a) Some boundaries have been adjusted because of changes. *See Estimated Resident Population in Statistical Local Areas* (3201.4). *(b)* Small cells have been randomly adjusted to avoid the release of confidential data. Hence totals may not be the sum of their components.

Census Counts in Statistical Local Areas
Adelaide Statistical Division[(a)]

STATISTICAL DIVISION *Subdivision and* *statistical local area*	*Persons at Census date*		
	1981	*1986*	*1991*
ADELAIDE	931,660	977,721	1,023,597
Northern	270,555	288,398	311,176
Elizabeth (C)	32,528	30,687	28,954
Enfield (C) Pt A	49,969	47,111	45,278
Gawler (M)	10,617	12,488	15,068
Munno Para (C)	23,753	27,656	31,900
Salisbury (C)	86,433	96,618	106,007
Tea Tree Gully (C)	67,255	73,838	83,969

Census Counts in Statistical Local Areas
Adelaide Statistical Division(a) (continued)

STATISTICAL DIVISION Subdivision and statistical local area	Persons at Census date		
	1981	1986	1991
Western	207,311	208,393	206,143
Enfield (C) Pt B	16,828	16,417	16,224
Henley and Grange (C)	15,519	14,752	14,207
Hindmarsh (M)	7,593	7,847	8,097
Port Adelaide (C)	35,430	37,319	38,227
Thebarton (M)	9,208	8,533	7,701
West Torrens (C)	45,099	43,639	42,863
Woodville (C)	77,634	79,886	78,824
Unincorporated		Included with Port Adelaide (C)	
Eastern	206,863	210,057	212,019
Adelaide (C)	12,656	14,157	14,843
Burnside (C)	37,593	37,198	37,636
Campbelltown (C)	43,084	43,352	43,516
East Torrens (DC)	5,152	5,748	6,500
Kensington and Norwood (C)	8,950	8,947	8,803
Payneham (C)	16,502	15,813	15,327
Prospect (C)	18,591	18,299	18,601
St Peters (M)	8,458	8,280	8,142
Stirling (DC)	13,193	15,255	16,185
Unley (C)	35,844	36,195	35,692
Walkerville (M)	6,840	6,813	6,774
Southern	246,931	270,873	294,259
Brighton (C)	19,441	18,899	18,423
Glenelg (C)	13,306	13,248	12,956
Happy Valley (C)	19,825	28,428	34,700
Marion (C)	66,551	69,695	73,942
Mitcham (C)	60,309	61,213	60,939
Noarlunga (C)	60,806	69,670	80,882
Willunga (DC)	6,693	9,720	12,417

(a) Counts are for boundaries existing at 6 August 1991.
(C) Municipality with city status (DC) District Council (M) Municipality

Urban centres and rural localities

Census counts are available for urban centres and rural localities. These consist of one or more adjoining census collection districts with urban characteristics (based on *Linge* criteria). Urban centres are defined as population clusters of 1,000 or more people (including known holiday resorts of smaller size) and rural localities are defined as population clusters of between 200 and 999 people. Between 1986 and 1991 most urban centres beyond the Adelaide Statistical Division experienced population growth. This was most evident in towns within 100 kilometres of Adelaide. In the 'Iron Triangle', Port Pirie increased slightly while Port Augusta and Whyalla declined.

Persons in Urban and Rural Areas

Census	Urban		Rural	Total (including migratory)
	Adelaide (a)	Other (b)		
1971	809,482	183,187	179,148	1,173,707
1976	857,196	198,777	187,546	1,244,756
1981	882,520	207,934	193,628	1,285,033
1986	917,000	221,036	205,625	1,345,945
1991	957,480	235,088	207,535	1,400,622

(a) Urban Adelaide is a subset of the Adelaide Statistical Division. *(b)* 'Other Urban' comprises clusters of 1,000 or more persons and a number of holiday resorts which are regarded as urban on a dwelling density basis.

Population in other urban centres

Only 16.8 per cent of the South Australian population is located in urban centres outside the capital city. This is low compared with New South Wales, Victoria and Queensland. In each of these States, there are at least six centres outside the capital city with a population in excess of 20,000, whereas in South Australia the only such centres are Whyalla and Mount Gambier.

Persons in Urban Centres[(a)]

Urban centre	*1986*	*1991*	*Urban centre*	*1986*	*1991*
Adelaide	917,000	957,480	Millicent	5,075	5,118
Aldinga Beach	3,041	3,541	Moonta	2,199	2,723
Angaston	1,823	1,819	Mount Barker	5,370	6,239
Ardrossan	963	1,008	Mount Gambier	20,813	21,153
Balaklava	1,365	1,439	Murray Bridge	11,893	12,725
Barmera	1,912	1,859	Nairne	889	1,346
Berri	3,502	3,733	Naracoorte	4,636	4,711
Bordertown	2,318	2,235	Nuriootpa	3,209	3,321
Burra	1,187	1,191	Penola	1,222	1,147
Ceduna	2,877	2,753	Peterborough	2,239	2,138
Clare	2,591	2,575	Port Augusta	15,291	14,595
Coober Pedy	2,103	2,491	Port Elliot	1,050	1,203
Crafers–Bridgewater	11,222	11,887	Port Lincoln	11,552	11,345
Crystal Brook	1,294	1,282	Port Pirie	13,960	14,110
Gawler	11,354	13,835	Quorn	1,079	1,056
Goolwa	2,359	3,018	Renmark	3,489	4,256
Hahndorf	1,688	1,661	Roxby Downs	492	1,999
Jamestown	1,372	1,359	Strathalbyn	1,924	2,623
Kadina	3,263	3,536	Tailem Bend	1,542	1,502
Kapunda	1,622	1,979	Tanunda	2,856	3,087
Keith	1,189	1,176	Tumby Bay	996	1,147
Kingscote	1,403	1,443	Victor Harbor	5,318	5,930
Kingston (SE)	1,367	1,425	Waikerie	1,593	1,748
Leigh Creek	1,967	1,378	Wallaroo	2,224	2,465
Lobethal	1,580	1,521	Whyalla	26,900	25,526
Loxton	3,372	3,322	Willunga	826	1,164
Maitland	1,103	1,066	Woodside	853	1,085
Mannum	2,056	2,025	Woomera	1,805	1,600
McLaren Vale	1,196	1,469			

(a) Urban centres are clusters of 1,000 or more persons. The figures are Census counts.

Projections of the population

Population projections have been prepared using the cohort–component method, *i.e.* a base population in single years of age is brought forward year by year by applying assumptions about future levels of fertility, mortality and migration. These assumptions lead to a range of projections for the State, *e.g.* under Series A the population is projected to reach 1,817,200 by 2031, under Series D 1,624,900.

Projected Population (Including Migration)[(a)]
('000)

At 30 June	*Series A*	*Series B*	*Series C*	*Series D*
1996	1,522.3	1,519.6	1,518.5	1,514.5
2001	1,581.9	1,574.3	1,572.0	1,553.2
2006	1,633.5	1,620.0	1,617.6	1,580.8
2011	1,678.8	1,658.9	1,656.8	1,601.1
2016	1,720.4	1,693.9	1,692.1	1,616.6
2021	1,758.8	1,725.3	1,723.1	1,627.3
2026	1,791.9	1,751.1	1,747.5	1,630.8
2031	1,817.2	1,768.9	1,763.2	1,624.9

(a) Based on final estimated resident population at 30 June 1989.

The following table indicates that for all series the proportion of the population aged under 15 is projected to decrease significantly while the proportion 65 and over increases.

Projected Age Group Proportions (Including Migration)
(Per cent)

Age group (years)	*At 30 June*	*Series A*	*Series B*	*Series C*	*Series D*
0–14	2011	17.18	17.07	16.31	16.05
	2031	15.55	15.39	14.56	14.16
15–64	2011	68.18	68.13	68.86	68.74
	2031	62.26	61.94	62.57	61.65
65 and over	2011	14.64	14.80	14.83	15.21
	2031	22.19	22.67	22.87	24.19

Further references

Additional information may be found in the following ABS publications:

2730.4 *Census Counts for Small Areas : South Australia*
3101.0 *Australian Demographic Statistics*
3201.4 *Estimated Resident Population in Statistical Local Areas, South Australia*
3204.4 *Estimated Resident Population by Age and Sex in Statistical Local Areas, South Australia*
3222.0 *Projections of the Population of Australian States and Territories 1989–2031*

4.2 THE CENSUS

Early 'musters'

Population returns in one form or another have existed from a very early period in the history of Australia. The earliest enumerations were known as 'musters', and although the actual results of very few of them have been preserved, it is probable that during the early days of colonisation they were of frequent occurrence. The first official 'muster' was taken in 1788 soon after the settlement of Sydney Cove.

Development of the Census

The first regular census in Australia was taken in New South Wales in November 1828, and included the population of Moreton Bay (in what is now Queensland). This census sought details of the names, ages and civil conditions of the inhabitants. The first recognised census in South Australia was taken in 1844. The 1881 Census was the first census taken simultaneously in all the States of Australia and formed part of the first simultaneous census of the British Empire.

Under the Commonwealth of Australia Constitution Act of 1900, 'Census and Statistics' became Commonwealth Government functions and with the passing of the empowering legislation, the *Census and Statistics Act 1905* (Cwlth), all censuses of Australia have been taken under the authority of this Act. The first Australian census collected under the Act was that of 1911; subsequent censuses were taken in 1921, 1933, 1947, 1954, 1961, 1966, 1971, 1976, 1981, 1986 and 1991. The next census will be conducted in 1996.

Scope of the Census

The census is intended to count all people and dwellings in Australia. In 1986, for the first time, the census was extended to include people in Australia's external territories: Cocos (Keeling), Christmas and Norfolk Islands.

Diplomatic representatives of other governments and their staff and families having diplomatic immunity in accordance with international practice are excluded from censuses. Up to and including the 1966 Census, full–blood Aborigines were also excluded under the provisions of Section 127 of the Constitution, but following the results of a referendum held in 1967 this was repealed and full–blood Aborigines have been included in censuses since 1971.

The census is taken using a household form delivered to every private dwelling seeking information about all inhabitants and the dwelling. The census count includes babies born at or before midnight on Census night and excludes persons dying before midnight on Census night. Private dwellings include houses, flats, maisonettes, townhouses and caravans in caravan parks. Census forms are also delivered to ships in port or which will be travelling between Australian ports on Census night; and to non–private dwellings such as boarding schools, gaols, hotels and motels, hospitals and nursing homes.

Dwellings excluded from census results are those occupied by accredited persons having diplomatic immunity. Dwellings occupied solely by full–blood Aborigines were excluded at censuses before 1971.

The 1991 Census

The twelfth Census of Population and Housing was conducted in 1991 with Census night on Tuesday 6 August.

There were forty–three questions on the 1991 Census Household Form, thirty–nine related to personal characteristics and four to household or dwelling characteristics. Up to forty–six responses were required from each person.

The census form was designed so that responses marked by householders could be read by optical mark recognition (OMR) technology. The questions requiring written responses *e.g.* occupation, were coded using a computer assisted coding system developed for census processing.

4.3 CHARACTERISTICS OF THE POPULATION

The following section provides summary information on various characteristics of the population obtained from the most recent censuses. A full listing of data items collected from the 1991 Census is included in the *1991 Census Dictionary* (2901.0). The data in this section are Census counts at place of enumeration *i.e.*, where people were on Census night.

Marital status

In August 1991, 27.6 per cent of all persons aged 15 years and over claimed to have never married, compared with 26.9 per cent in 1986. Married persons in 1991 represented 57.2 per cent of all persons aged 15 years and over, compared with 59.0 per cent in 1986. At the 1991 Census, 81.4 per cent of widowed persons were females.

Marital Status, Persons Aged 15 years and Over

Marital status	Census 30 June 1986		Census 6 August 1991	
	Males	Females	Males	Females
Never married	158,634	124,023	169,195	135,505
Married	309,308	309,909	313,989	317,006
Separated, not divorced	12,174	14,286	14,342	16,319
Widowed	12,155	58,564	13,942	60,915
Divorced	22,114	28,692	27,302	35,178
Total	*514,385*	*535,474*	*538,770*	*564,923*

The proportion of divorced persons has increased significantly in the past decade, from 3.7 per cent in 1981, to 4.8 per cent in 1986, to 5.7 per cent in 1991.

The Aboriginal and Torres Strait Islander population

Statistics of the total Aboriginal and Torres Strait Islander population should be treated with caution as comparisons between numbers obtained from one Census to another can be affected by changes in social attitudes, changes made to the wording of the Census Aboriginality question (in an attempt to improve coverage and reporting), plus changes to the collection and processing procedures.

The Aboriginal and Torres Strait Islander population in 1991 was 16,249, comprising 7,926 males and 8,323 females. The indigenous population comprised almost 1.2 per cent of the overall State population.

The following table shows Census counts of the Aboriginal and Torres Strait Islander population at 1986 and 1991, for the major urban localities and communities.

Location of the Aboriginal and Torres Strait Islander Population

Locality	Census count		Locality	Census count	
	1986	1991		1986	1991
Adelaide	5,692	6,688	Pipalyatjara	102	144
Amata	277	374	Point Pearce	182	133
Aparawatatja (Fregon)	268	310	Port Augusta	1,415	1,345
Berri	93	101	Port Lincoln	394	467
Ceduna	402	406	Port Pirie	124	151
Coober Pedy	244	162	Pukatja (Ernabella)	365	471
Gerard	136	104	Quorn	82	115
Indulkana	238	317	Raukkan (Point McLeay)	114	124
Koonibba	96	137	Umoona	86	119
Mimili	145	213	Whyalla	515	395
Mount Gambier	131	168	Yalata	221	311
Murray Bridge	298	345	Rest of State	2,486	2,915
Nepabunna	91	101			
Oodnadatta	94	133	*Total*	*14,291*	*16,249*

In 1991, 59.6 per cent of the Aboriginal and Torres Strait Islander population were under 25 years of age compared to 36.5 per cent of the State population. Only 2.7 per cent were aged 65 years and over, while 12.7 per cent of the State population was in this age group. More information is available in Part 4.7 The Aboriginal Population.

Country of birth

Of the persons in South Australia at the 1911 Census, 85.7 per cent were Australian born, increasing to 93.3 per cent in 1947. Overseas migration had lowered the proportion of Australian born persons to 86.1 per cent by 1954, and to 76.1 per cent in 1991. The proportion of persons in South Australia born in the United Kingdom (including the Republic of Ireland) has decreased steadily from 12.7 per cent in 1976, to 10.9 per cent in 1986 and 10.4 per cent in 1991. The proportion of persons born in Asian countries has increased from 2.0 per cent in 1986 to 2.3 per cent in 1991.

Country of Birth

	Census 30 June 1986	*Census 6 August 1991*			*Increase*
Country of birth	*Persons*	*Males*	*Females*	*Persons*	*Persons*
Australia	1,029,470	522,803	542,481	1,065,284	35,814
New Zealand	8,287	5,211	4,876	10,087	1,800
Europe:					
United Kingdom and Republic of Ireland	146,404	71,439	74,433	145,872	–532
Germany	14,664	6,906	7,442	14,348	–316
Greece	13,456	7,056	6,573	13,629	173
Italy	29,607	15,372	13,590	28,962	–645
Netherlands	10,198	5,014	4,848	9,862	–336
Poland	7,936	4,375	3,983	8,358	422
Yugoslavia	8,774	5,003	4,041	9,044	270
Other	20,824	8,826	7,758	16,584	–4,240
Total Europe	*251,863*	*123,991*	*122,668*	*246,659*	*–5,204*
Asia:					
India	2,642	1,508	1,471	2,979	337
Malaysia	3,055	2,031	2,156	4,187	1,132
Vietnam	6,986	4,944	4,327	9,271	2,285
Other	14,730	7,245	9,079	16,324	1,594
Total Asia	*27,413*	*15,728*	*17,033*	*32,761*	*5,348*
Other countries	12,181	11,689	11,498	23,187	11,006
Total born outside Australia	*299,744*	*156,619*	*156,075*	*312,694*	*12,950*
Total (including not stated)	**1,345,945**	**690,768**	**709,854**	**1,400,622**	**54,677**

Religion

Answers to the only non–compulsory Census question, concerning religion, have revealed some marked changes over the past three Censuses. The proportion indicating no religion has risen from 13.9 per cent in 1981 to 17.4 per cent in 1991. Over the same period, the proportion of persons reporting affiliation to Christian denominations has decreased from 74.5 per cent to 70.3 per cent. The number of adherents of non–Christian religions, while not large, grew from 7,128 (0.6 per cent) in 1981 to 18,118 (1.3 per cent) in 1991.

Religious Affiliation

Religious denomination	*Census 1981*	*Census 1986*	*Census 1991*
Christian:			
Anglican	260,919	242,722	251,268
Baptist	22,287	21,415	27,395
Brethren	1,099	1,398	1,491
Catholic *(a)*	255,332	267,137	294,611
Church of Christ	18,657	16,629	11,517
Congregational	2,834	1,524	250
Jehovah's Witnesses	5,461	6,539	6,907
Latter Day Saints (Mormons)	3,617	3,515	3,364
Lutheran	63,860	64,851	71,866
Methodist	85,935	*(b)*	*(b)*
Orthodox	36,423	37,149	40,594
Pentecostal *(c)*	11,232	14,997	19,361
Presbyterian	21,725	18,566	27,247
Salvation Army	8,079	8,268	7,363
Seventh Day Adventist	3,139	2,944	2,536
Uniting Church	108,857	*(d)*176,980	199,886
Other Christian	47,815	52,234	19,253
Total	*957,271*	*936,868*	*984,909*
Non–Christian:			
Buddhist	2,229	5,847	8,529
Hindu	*(e)*	1,171	1,629
Jewish	1,114	1,144	1,341
Islamic (Moslem)	1,456	2,486	3,110
Other non–Christian	2,329	3,195	3,509
Total	*7,128*	*13,843*	*18,118*
Non–theistic	*(e)*	289	129
Inadequately described	6,529	5,458	3,540
No religion (so described)	178,136	227,275	243,150
Not stated	135,970	162,212	150,776
Total	**1,285,034**	**1,345,945**	**1,400,622**

(a) Includes 'Roman Catholic' and 'Catholic'. *(b)* Included with Uniting Church from 1986. *(c)* Includes Assemblies of God. *(d)* Includes Methodist from 1986. *(e)* Not available for 1981.

Educational qualifications

The table below shows data for the highest level of educational qualifications obtained as reported in the 1991 Census.

Educational Qualifications : Highest Level Obtained, Persons 15 Years of Age and Over, Census 1991

Level of qualification	*Males*	*Females*	*Persons*	*Per cent*
Higher degree	6,385	2,139	8,524	0.8
Postgraduate diploma	3,575	4,999	8,574	0.8
Bachelor degree	29,052	24,004	53,056	4.8
Undergraduate diploma	11,204	33,122	44,326	4.0
Associate diploma	8,248	5,027	13,275	1.2
Skilled vocational	97,560	13,016	110,576	10.0
Basic vocational	15,282	21,126	36,408	3.3
No qualification	308,480	398,048	706,528	64.0
Not stated, inadequately described	58,508	63,518	122,026	11.1
Total	*538,294*	*564,999*	*1,103,293*	*100.0*

The data highlight significant differences in the distribution of highest level qualifications obtained by males and females. Males have obtained more Bachelor and Higher degrees, with females having gained a larger number of undergraduate diplomas. Persons with no qualifications comprised 64.0 per cent of the population aged 15 years and over, compared with 70.3 per cent in 1981.

Family structures

The 1991 Census included questions to identify family composition. For Census purposes, a family is a group of related individuals, where at least one person is aged 15 years and over. The term related includes related by birth and by the formation of a marriage or marriage–like relationship.

There were 374,715 families in South Australia at the 1991 Census. Of these 128,737 (34.4 per cent) were two parent families with dependent children only; 36,625 (9.8 per cent) were two parent families with non–dependent offspring; 27,545 (7.4 per cent) were one parent families with dependent children only; 14,302 (3.8 per cent) were one parent families with non–dependent offspring and 129,619 (34.6 per cent) were couples without offspring.

Family Types by Number of Dependent Children, 1991 Census

	Number of dependent children			
Family type	*None*	*One*	*Two or more*	*Total*
One parent	14,752	17,706	15,701	*(a)*48,159
Two parent	37,364	52,255	100,992	*(b)*190,611
Total	*52,116*	*69,961*	*116,693*	*238,770*

(a) Includes the family combination of one parent, children and other related individuals. *(b)* Includes the family combination of two parents, children and other related individuals.

These data show that of all families with dependent children, 17.9 per cent were single parent families and 82.1 per cent were two parent families. Of all one parent families with dependent children, 47.2 per cent contained two or more children.

In the 1991 Census almost 8.0 per cent of all couples lived in a *de facto* relationship, compared with 5.5 per cent in 1986. In 1991, 41.2 per cent of all *de facto* couples had dependent offspring.

4.4 MIGRATION

Under the Constitution, the Commonwealth makes laws governing migration. Persons wishing to enter Australia as permanent settlers must either:

(a) have a spouse or fiancé, or parents, children, brothers or sisters, aunts or uncles legally resident in Australia who can sponsor them;

(b) be refugees or in other special humanitarian need; or

(c) have skills or personal qualities which will benefit Australia.

New Zealanders may enter Australia without prior authority if they hold a valid New Zealand passport.

Overseas arrivals and departures

The following table gives details for 1992 of overseas arrivals who gave South Australia as their State of intended residence and people leaving for overseas who gave South Australia as their State of residence. Long–term refers to an intended stay of more than twelve months, and short–term as less than twelve months.

Overseas Arrivals and Departures : Category of Traveller, 1992

Category of traveller	*Males*	*Females*	*Total*
ARRIVALS			
Permanent settlers	2,000	2,199	4,199
Long–term:			
Australian residents	1,680	1,849	3,529
Overseas visitors	1,271	1,036	2,307
Total permanent and long–term	*4,951*	*5,084*	*10,035*
Short–term:			
Australian residents	57,015	55,322	112,337
Overseas visitors	28,811	28,044	56,855
Total arrivals	**90,777**	**88,450**	**179,227**
DEPARTURES			
Permanent	710	766	1,476
Long–term:			
Australian residents	1,825	1,782	3,607
Overseas visitors	918	818	1,736
Total permanent and long–term	*3,453*	*3,366*	*6,819*
Short–term:			
Australian residents	63,468	57,851	121,319
Overseas visitors	30,581	28,432	59,013
Total departures	**97,502**	**89,649**	**187,151**

Visitors

Overseas residents are allowed to visit Australia for short periods for tourism, business, to see relatives or friends, or for pre–arranged medical treatment. Visitors are not to undertake a job or formal study while in Australia, and must leave at the end of their authorised period of stay.

Overseas students

Australia accepts foreign students and trainees in order to help build a strong and competitive international education and services sector. This also enables students and trainees to acquire skills and qualifications of benefit to themselves and their countries. Some are sponsored by their governments while others are private students.

Temporary residents

Permanent residents are given first priority for employment, but temporary residence may be granted to people from overseas, who possess expertise not available here to enable them to engage in pre–arranged specialised activities. Persons seeking temporary residence for longer than twelve months are required to meet the health and character requirements which apply to permanent settlers.

Citizenship

The status of 'Australian Citizen' was created under the *Nationality and Citizenship Act 1948* (Cwlth), which came into force on 26 January 1949. The relevant Act is now the *Australian Citizenship Act 1948* (Cwlth) and under its provision all migrants, regardless of origin, are required to satisfy uniform requirements for the granting of citizenship. Citizenship is normally conferred at ceremonies conducted by local government authorities throughout the State.

Further references

Additional information may be found in the following ABS publications:

3101.0 *Australian Demographic Statistics* (Quarterly)
3401.0 *Overseas Arrivals and Departures, Australia* (Monthly)
3402.0 *Overseas Arrivals and Departures, Australia* (Quarterly)
3404.0 *Overseas Arrivals and Departures, Australia* (Annual)

4.5 BIRTHS AND DEATHS

Current legislation on compulsory registration of births and deaths is contained in the *Births, Deaths and Marriages Registration Act 1966* which came into operation on 1 January 1968. The administration of the Act is the responsibility of the Principal Registrar of Births, Deaths and Marriages.

The Principal Registrar maintains a register of all live births and of all deaths registered in the State. The current legislation does not require still births to be registered, but it provides for a 'Medical Certificate of Cause of Perinatal Death' to be filled in and forwarded to the Principal Registrar by the attending medical practitioner in respect of a 'child not born alive of at least twenty weeks gestation or four hundred grams weight'. The 'perinatal' certificates are also required from attending medical practitioners for children dying within twenty–eight days of birth. The birth of each live–born child is required to be registered by a parent within sixty days of the date of birth. Registration of a live birth after the expiration of sixty days following the date of birth requires the payment of a fee and a declaration in a form prescribed by the Act.

A death must be registered within fourteen days of the date of death by the occupier of the building or place in which the death occurred. Special provisions and penalties exist for the late registration of a death. A body may not be buried unless the undertaker is in possession of a 'Notice of signing of Medical Certificate of Cause of Death' signed by a medical practitioner or of an order by a coroner for burial, and the undertaker is required within seven days of the disposal of the body to notify the Principal Registrar of such disposal.

In accordance with international practice, statistics for a period are on the basis of the births and deaths which were registered during that period. However, numbers registered in a period usually differ from the number of occurrences in the same period and, mainly because of the longer period allowed for registration, such variations generally are more apparent in birth than in death figures. In this section, unless otherwise stated, details of births are on the basis of State of usual residence of the mother and details of deaths are on the basis of State of usual residence of the deceased, regardless of where in Australia the event occurred.

Births

In the following tables births to mothers usually resident in South Australia which took place overseas are excluded, while births to mothers usually resident overseas that occurred in South Australia are included. Similarly, deaths of South Australian residents which occurred overseas are excluded, and deaths of persons usually resident overseas that occurred in South Australia are included. The South Australian crude birth rate (number of births per thousand of mean estimated resident population) during 1992 was 13.3 compared with the Australian rate of 15.1.

Live Births

Year	Total live births occurred (a)	Live births registered				
		Total	Rate (b)	Males	Females	Sex ratio (c)
1988	19,264	19,155	13.6	9,917	9,238	107.4
1989	19,503	19,610	13.8	10,152	9,458	107.3
1990	19,664	19,863	13.9	10,170	9,693	104.9
1991	19,386	19,640	13.6	10,175	9,465	107.5
1992	19,643	19,311	13.3	9,957	9,354	106.4

(a) Figures are subject to the addition of late registrations, particularly for 1992. *(b)* Number per 1,000 of mean estimated resident population. *(c)* Number of male births per 100 female births.

Age–specific birth rates

Age–specific birth rates are the live births registered during the year according to age of mother per 1,000 of the female resident population.

Age–specific Birth Rates and Total Fertility

Year	Age group (years)							Total fertility (a)
	15–19	20–24	25–29	30–34	35–39	40–44	45–49	
1971 *(b)*	42.4	166.3	139.6	70.1	33.3	9.5	0.6	2,309
1976 *(b)*	29.6	126.5	137.4	59.2	17.3	4.2	0.3	1,886
1981 *(b)*	26.3	104.2	139.6	65.0	18.8	3.1	0.2	1,785
1986 *(b)*	21.3	90.1	136.5	79.6	21.5	3.4	0.2	1,763
1991 *(b)*	21.4	72.1	127.5	90.9	29.4	4.0	0.2	1,715
1992	18.7	66.7	120.3	94.9	34.2	5.4	0.4	1,703

(a) The number of children 1,000 women would bear during their lifetimes if they experience the rates of the year shown. *(b)* Census year.

Age–specific birth rates for women aged 30 years and over decreased from 1961 until the late 1970s but have since increased significantly. These figures reflect the tendency to smaller families and the later median age of first nuptial confinements.

Confinements and nuptiality

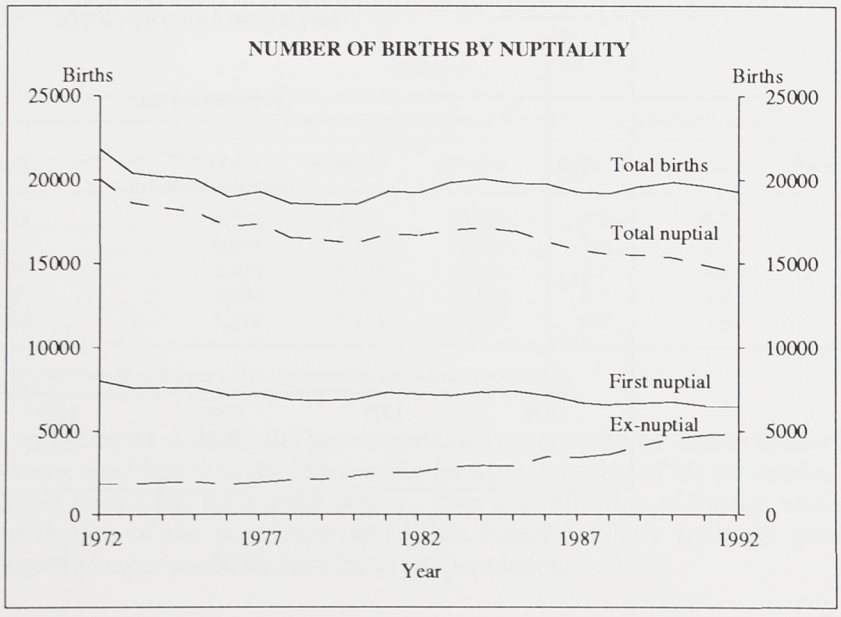
Confinements are the number of pregnancies resulting in at least one live birth. Multiple confinements are those resulting in two or more births, at least one of which is live–born. Live births are identified as nuptial where the father registered was married to the mother at the time of birth, or where the husband died during pregnancy. Confinements and children of Aboriginal mothers considered to be tribally married are classified as nuptial. Other confinements, and the children resulting from them, are classified as ex–nuptial whether or not the parents were living together at the time of birth and whether or not the child may subsequently have been legitimised or adopted.

Confinements : Nuptiality and Plurality by Age Group of Mother, 1992

Particulars	Age of mother (years)						Total (a)
	19 and under	20–24	25–29	30–34	35–39	40 and over	
	NUMBER						
Nuptial:							
Single	124	2,028	5,376	4,753	1,558	237	14,087
Twins	–	15	64	78	25	4	186
Triplets or higher order	–	–	–	4	3	–	7
Total	*124*	*2,043*	*5,440*	*4,835*	*1,586*	*241*	*14,280*
Ex–nuptial:							
Single	823	1,692	1,165	699	283	61	4,728
Twins or higher order	1	18	14	13	6	1	53
Total	*824*	*1,710*	*1,179*	*712*	*289*	*62*	*4,781*
Total confinements	**948**	**3,753**	**6,619**	**5,547**	**1,875**	**303**	**19,061**
	PER CENT						
Total nuptial	13.1	54.4	82.2	87.2	84.6	79.5	74.9
Total ex–nuptial	86.9	45.6	17.8	12.8	15.4	20.5	25.1

(a) Includes not stated.

Since 1960 there has been a marked increase in the number and rate of ex–nuptial births. For the previous forty years, the rate remained relatively steady at about 3 per hundred live births, but in recent years the rate has increased sharply, reaching a record level of 25.0 per hundred live births in 1992.



Gross and net reproduction rates

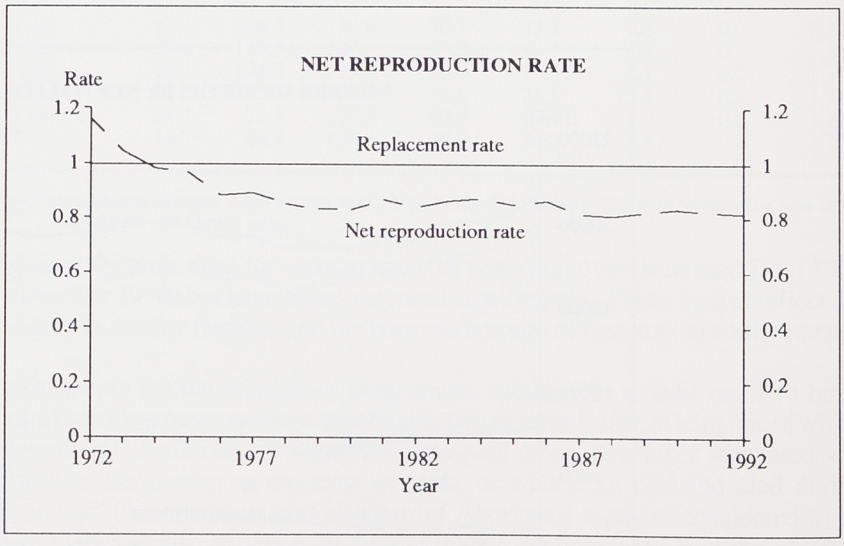
The gross reproduction rate is an indication of the number of live females that can be expected to be born to a woman through her child–bearing years. The net reproduction rate, which is a measure of the degree to which the population can replace itself, is derived from the gross reproduction rate by taking into account the females who fail to survive to the end of their child–bearing period.

The following table shows a general decline in the net reproduction rate. The current level is lower than the point at which women produce only one female child to take their place in the reproductive cycle and, excluding the impact of migration, if this trend continues, zero population growth will be reached ultimately and the population will begin to decline. It should be realised, however, that this is not a forecast of what can be anticipated but only a hypothetical projection of what will happen if the given conditions upon which it has been based continue to apply.

Gross and Net Reproduction Rates

		Net reproduction rate	
Year	*Gross reproduction rate*	*Rate*	*Mortality experience on which rate is based*
1976 *(a)*	0.900	0.880	1975–1977
1981 *(a)*	0.880	0.866	1980–1982
1986 *(a)*	0.876	0.862	1985–1987
1991 *(a)*	0.833	0.821	1991
1992	0.825	0.813	1992

(a) Census year.



Age of parents and duration of marriage

For more than twenty years there has been an increasing trend in both the median age of parents and the duration of marriage for all first nuptial confinements. The median age of mother for first nuptial confinements increased from 23.6 years in 1972 to 28.5 years in 1992, while the median age of mother for all confinements rose from 25.2 years to 28.7 years. The median age of father for all nuptial confinements increased from 28.0 years to 31.8 years in the same period.

In 1972 the median duration of marriage for first nuptial confinements was 1.8 years, but in 1992 had risen to 2.9 years. For ex–nuptial confinements the median age of mother fell from 20.7 years in 1972 to 20.5 years in 1973 but since then has shown an upward trend to 24.5 years in 1992.

Median Age and Duration of Marriage
(Years)

Particulars	*1990*	*1991*	*1992*
Median age of mother:			
Nuptial first confinements	27.6	27.7	28.5
All nuptial confinements	28.8	29.1	29.6
Ex–nuptial confinements	23.7	24.0	24.5
All confinements	*28.1*	*28.3*	*28.7*
Median age of father:			
Nuptial confinements	31.1	31.3	31.8
Median duration of marriage:			
Nuptial first confinements	2.8	2.8	2.9

Deaths

The 10,925 deaths of South Australian residents registered during 1992 represented a crude death rate of 7.5 per thousand of mean population. Although crude death rates in excess of 16.0 were recorded in the 1860s, the rate has not exceeded 9.0 since 1956. Other fluctuations in the number of deaths and the crude death rate over time can be seen in the Statistical Summary.

Deaths

	Numbers registered			*Crude death rate (a)*		
Year	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
1988	5,793	4,897	10,690	8.3	6.9	7.6
1989	6,094	5,254	11,348	8.6	7.3	8.0
1990	5,833	5,105	10,938	8.1	7.1	7.6
1991	5,924	5,252	11,176	8.3	7.2	7.7
1992	5,812	5,113	10,925	8.0	7.0	7.5

(a) Number of deaths per 1,000 of mean estimated resident population.

In recent years male deaths have significantly outnumbered female deaths for persons aged less than 80 years, while for ages in excess of 80 the number of female deaths has been much higher. This is a reflection of the age and sex distribution of the population which has resulted mainly from the greater longevity experienced by females in the population.

Age at Death

Age group (years)	Males		Females		Persons	
	1991	1992	1991	1992	1991	1992
Under 1	65	68	44	49	109	117
1–4	5	12	9	10	14	22
5–9	6	8	8	10	14	18
10–14	4	7	6	9	10	16
15–19	51	41	27	20	78	61
20–24	93	70	28	23	121	93
25–29	69	76	35	28	104	104
30–34	73	60	38	39	111	99
35–39	103	83	41	35	144	118
40–44	92	97	70	58	162	155
45–49	129	140	66	82	195	222
50–54	179	177	111	115	290	292
55–59	252	266	142	149	394	415
60–64	480	469	257	241	737	710
65–69	736	739	446	392	1,182	1,131
70–74	882	866	575	567	1,457	1,433
75–79	997	1,013	802	763	1,799	1,776
80 and over	1,708	1,620	2,547	2,523	4,255	4,143
All ages	*5,924*	*5,812*	*5,252*	*5,113*	*11,176*	*10,925*

Age–specific death rates

The following tables show that age–specific death rates, *i.e.* deaths in each age group expressed as a rate per 1,000 of population in that age group, have generally fallen for males and females over the last 20 years. Because age composition of the population is known accurately only at censuses, the periods shown are those with a census date as their centre.

Age–specific Death Rates : Males

Age group (years)	Death rate (a)				
	1970–72	1975–77	1980–82	1985–87	1990–92
0–4	4.66	3.20	2.76	2.33	1.47
5–9	0.43	0.36	0.33	0.23	0.22
10–14	0.38	0.36	0.38	0.22	0.14
15–19	1.48	1.51	1.27	1.23	0.16
20–24	1.55	1.56	1.25	1.36	0.86
25–29	1.12	1.27	1.19	1.20	1.48
30–34	1.41	1.23	1.07	1.16	1.36
35–39	2.04	1.72	1.57	1.32	1.33
40–44	3.15	2.60	2.29	2.20	1.59
45–49	5.49	5.05	4.16	3.17	2.29
50–54	9.37	8.15	7.47	5.72	3.57
55–59	16.01	13.22	12.76	10.87	5.77
60–64	25.10	22.33	19.52	16.09	7.91
65–69	41.00	36.05	31.09	27.54	16.43
70–74	64.42	54.08	49.09	43.45	34.21
75–79	96.09	87.50	78.54	70.14	56.00
80–84	142.39	132.63	117.92	112.19	122.35
85 and over	230.02	211.49	201.85	187.97	388.26
All ages	*9.31*	*8.52*	*8.36*	*8.18*	*8.16*

(a) Average annual number of deaths per 1,000 of population at ages shown. From 1975–77 estimated resident population.

Age–specific Death Rates : Females

Age group (years)	Death rate (a)				
	1970–72	*1975–77*	*1980–82*	*1985–87*	*1990–92*
0–4	3.39	2.49	2.00	1.84	1.17
5–9	0.32	0.35	0.14	0.17	0.19
10–14	0.29	0.21	0.17	0.17	0.15
15–19	0.65	0.55	0.45	0.45	0.18
20–24	0.48	0.44	0.44	0.52	0.37
25–29	0.60	0.42	0.36	0.51	0.44
30–34	0.91	0.66	0.42	0.58	0.52
35–39	1.18	0.91	0.85	0.70	0.68
40–44	1.86	1.83	1.44	1.22	2.21
45–49	2.95	2.73	2.12	2.19	4.20
50–54	4.60	4.32	3.39	3.54	6.04
55–59	7.41	6.48	5.31	4.97	3.37
60–64	12.16	10.45	8.53	7.82	4.36
65–69	20.32	16.53	14.61	13.61	7.80
70–74	33.42	28.77	24.95	24.02	15.68
75–79	57.60	51.55	42.39	40.69	26.47
80–84	99.42	84.68	75.39	68.88	56.56
85 and over	186.55	176.26	163.02	146.38	233.72
All ages	*7.50*	*7.03*	*6.69*	*6.94*	*7.08*

(a) Average annual number of deaths per 1,000 of population at ages shown. From 1975–77 estimated resident population.

Infant mortality

The infant mortality rate, *i.e.* the number of deaths of children under one year to every 1,000 live births, has declined markedly in the last century. Rates around 200 were not uncommon in the 1850s and 1860s but by the early 1900s the rate was less than half this. Further rapid declines have been evident throughout this century with the 1992 rate being 6.1. The number of infant deaths and infant death rates since 1851 are shown in the Statistical Summary.

Infant Mortality : Age at Death

Year	*Under 1 day*	*1 day and under 1 week*	*1 week and under 4 weeks*	*4 weeks and under 3 months*	*3 months and under 6 months*	*6 months and under 12 months*	*Total under 12 months*	
							Number	*Rate (a)*
MALES								
1990	27	12	10	22	17	4	92	9.0
1991	28	5	3	11	10	8	65	6.4
1992	32	5	6	13	10	2	68	6.8
FEMALES								
1990	24	14	9	10	12	7	76	7.8
1991	14	9	6	8	3	4	44	4.6
1992	18	4	2	8	9	8	49	5.2
TOTAL								
1990	51	26	19	32	29	11	168	8.5
1991	42	14	9	19	13	12	109	5.5
1992	50	9	8	21	19	10	117	6.1

(a) Rate per 1,000 live births.

The fall in infant mortality is attributable to many factors, including better pre–natal care and obstetric management, which have led to safer births, and to the neonatal intensive care units at major maternity hospitals which have brought about a high survival rate for small and immature infants.

Statistics of infant mortality shown in the preceding table include the neonatal segment of perinatal deaths which are discussed in the following paragraph.

Perinatal deaths

Perinatal deaths comprise fetal deaths (stillbirths) and neonatal deaths (deaths within twenty–eight days of birth), of children weighing at least 500 grams at delivery or, when birthweight is unavailable, of at least twenty–two weeks gestation.

Live Births and Perinatal Deaths

		Perinatal deaths					
	Live births (a)	Fetal		Neonatal		Total perinatal	
Year	Number	Number	Rate (b)	Number	Rate (b)	Number	Rate (b)
1989 ...	19,610	127	6.4	72	3.7	199	10.1
1990 ...	19,863	115	5.8	89	4.5	204	10.3
1991 ...	19,640	104	5.3	54	2.7	158	8.0
1992 ...	19,311	111	5.7	46	2.4	157	8.1

(a) Includes a very small number of live births that do not meet the definition of a perinatal death. These have been excluded from the denominator used to calculate the perinatal death rates.
(b) Fetal death rate is the number of fetal deaths per 1,000 of relevant births registered plus fetal deaths. Neonatal death rates are per 1,000 relevant live births registered. Perinatal death rates are per 1,000 relevant live births registered plus fetal deaths.

Expectation of life

Based on the mortality conditions prevailing in South Australia during 1992, the life expectancy at birth for males was 75.1 years and for females 80.9 years (*see* Part 5.3).

Further references

More detailed information on life expectancy, perinatal deaths and causes of death in South Australia are included in Part 5.3 Health, and additional information may be found in the following ABS publications:

3304.0 *Perinatal Deaths, Australia*
3311.4 *Demography, South Australia*
3312.4 *Deaths, South Australia*

4.6 MARRIAGES AND DIVORCES

Marriages

The current legislation relating to marriages in Australia is the *Marriage Act 1961* (Cwlth) and in South Australia this is administered by the Principal Registrar of Births, Deaths and Marriages. Details of persons marrying classified by previous marital status for the three years to 1991 are shown below.

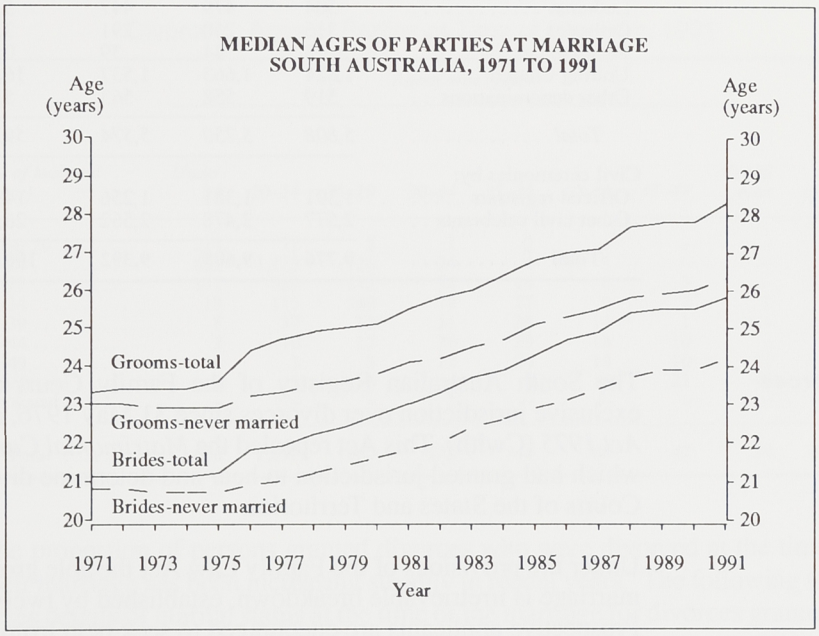
Previous Marital Status of Persons Marrying

	Bridegrooms			Brides				
Year	Never married	Widowed	Divorced	Never married	Widowed	Divorced	Total marriages	Rate (a)
1989	7,267	252	2,257	7,328	297	2,151	9,776	6.9
1990	7,107	243	2,259	7,241	276	2,092	9,609	6.7
1991	6,955	248	2,189	7,120	289	1,983	9,392	6.5

(a) Per 1,000 of mean estimated resident population.

Marriage numbers and rates for selected years from 1846 are shown in the Statistical Summary. The crude marriage rate rose throughout the 1960s from 7.0 in 1960 to 9.4 in 1970, gradually declined to a level of 8.7 in 1974 and fell substantially to 7.8 in 1975. The 1976 rate of 8.6 coincided with the introduction of the Family Law Act and a significant increase in the number of divorced persons remarrying. The rate has declined since then even though the proportion of persons marrying who have been divorced has been consistently above 20 per cent.

During 1991 the median age of persons marrying for the first time was 26.3 years for males and 24.2 years for females, a difference of 2.1 years. The median age of both bridegrooms and brides has shown an upward trend for more than ten years. This trend is apparent for persons who are marrying for the first time and those who have been married previously.



Median Age at Marriage and Previous Marital Status[(a)]

Year	Median age of bridegrooms (years)				Median age of brides (years)			
	Never married	Widowed	Divorced	Total	Never married	Widowed	Divorced	Total
1989	25.9	61.3	39.1	27.8	23.9	54.7	35.6	25.5
1990	26.0	62.5	39.4	27.8	23.9	52.3	36.3	25.5
1991	26.3	62.6	39.5	28.3	24.2	56.0	36.3	25.8

(a) The term 'median age' refers to that age which divides total age distribution into two halves, one half being below the median age and one half above.

In 1991, slightly less than two–thirds of marriages (65.8 per cent) involved partners both of whom had never been married; one partner had been married previously in 18.2 per cent of marriages, and a remarriage for both partners took place in 16.0 per cent of ceremonies.

Marriage rites

Marriages performed by civil officers in South Australia during the decade from 1960 to 1969 accounted for 10.9 per cent of all marriages. This proportion has increased steadily since then and was 40.7 per cent in 1991. This is related to the increasing numbers of divorced persons remarrying. In 1991, 63.7 per cent of marriages involving at least one party remarrying were performed by civil celebrants.

Marriages : Category of Authorised Celebrant

	Number of marriages			*Proportion of total marriages (per cent)*		
Rites	*1989*	*1990*	*1991*	*1989*	*1990*	*1991*
Denomination:						
Anglican	805	816	788	8.2	8.5	8.4
Baptist	196	210	194	2.0	2.2	2.1
Catholic	1,615	1,536	1,530	16.5	16.0	16.3
Churches of Christ	182	194	185	1.9	2.0	2.0
Lutheran	504	479	447	5.2	5.0	4.8
Orthodox	315	250	291	3.2	2.6	3.1
Presbyterian	48	44	39	0.5	0.5	0.4
Uniting Church	1,624	1,663	1,537	16.6	17.3	16.4
Other denominations	519	558	563	5.3	5.8	6.0
Total	*5,808*	*5,750*	*5,574*	*59.4*	*59.8*	*59.3*
Civil ceremonies by:						
Official registrars	1,391	1,381	1,256	14.2	14.4	13.4
Other civil celebrants	2,577	2,478	2,562	26.4	25.8	27.3
Total	**9,776**	**9,609**	**9,392**	**100.0**	**100.0**	**100.0**

Divorces

The South Australian Registry of the Family Court of Australia has had exclusive jurisdiction over divorces since 31 May 1976, under the *Family Law Act 1975* (Cwlth). This Act repealed the *Matrimonial Causes Act 1959* (Cwlth) which had granted jurisdiction to hear and determine divorces to the Supreme Courts of the States and Territories.

Under the provisions of the Family Law Act the sole ground for dissolution of marriage is irretrievable breakdown, established by twelve months separation. Prospective applicants are encouraged to seek help from marriage counsellors attached to the Family Court or from voluntary marriage guidance organisations.

In 1976, the first year of operation of the Family Law Act, there were 6,142 divorces granted in South Australia; 4,740 of these were granted under the new legislation and the remainder under the Matrimonial Causes Act which was repealed in that year. Since that year the highest number of divorces granted in a year was in 1982 when it was 4,526.

The following table gives details of divorces granted for the years 1989 to 1991.

Divorces

Particulars	*Unit*	*1989*	*1990*	*1991*
Divorces granted	No.	3,740	4,066	4,215
Crude divorce rate *(a)*	per cent	2.6	2.8	2.9
Median duration of marriage	years	10.2	10.3	10.6
Median interval between marriage and final separation	years	7.7	8.0	7.8
Divorces involving children:				
Number	No.	2,090	2,345	2,323
Percentage of total	per cent	55.9	57.7	55.1
Average issue	No.	1.9	1.9	1.9

(a) The crude divorce rate is the number of divorces granted per 1,000 of the mean estimated resident population.

Details of the relative ages at marriage of husbands and wives for divorces granted in 1991 are contained in the following table. The median age at marriage for husbands was 24.5 years and for wives 22.0 years.

Divorces : Ages of Parties at Time of Marriage, 1991

	Age of wife (years)								
Age of husband (years)	*Under 20*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45–49*	*50 and over*	*Total (incl. not stated)*
Under 20	214	71	3	1	2	–	–	–	291
20–24	692	1,123	126	24	4	3	–	–	1,973
25–29	131	539	275	58	14	6	3	–	1,028
30–34	19	115	180	79	27	9	2	1	432
35–39	8	37	52	51	38	14	1	–	201
40–44	3	10	15	26	29	18	10	–	111
45–49	–	3	3	11	24	16	10	12	80
50 and over	1	1	6	4	8	14	21	41	96
Not stated	–	–	–	1	–	–	–	–	3
Total	*1,068*	*1,899*	*660*	*255*	*146*	*80*	*47*	*54*	*4,215*

The proportion of persons granted divorces who were divorced at the time of their marriage has been increasing steadily in recent years. The following table gives details of marital status at the time of the marriage for divorces granted in the years 1989 to 1991.

Divorces : Marital Status at Time of Marriage

Marital status at marriage	*1989*	*1990*	*1991*
HUSBANDS			
Never married	3,037	3,351	3,438
Widowed	36	43	44
Divorced	667	672	733
WIVES			
Never married	3,072	3,351	3,474
Widowed	46	51	66
Divorced	622	664	675

Further references

Additional information may be found in the following ABS publication:

3311.4 *Demography, South Australia*

4.7 THE ABORIGINAL POPULATION

Statistics of the total Aboriginal population should be treated with caution as comparisons between numbers obtained from one census to another can be affected by changes in social attitudes, census awareness campaigns relating to Aboriginality and changes to the collection and processing procedures in an attempt to improve coverage and reporting.

There were 16,249 Aborigines counted in South Australia at the 1991 Census, an increase of 1,958 since 1986. Aborigines comprise a little over one per cent of the State's total population.

Births

The number of Aboriginal births registered in South Australia fell by 32 (5.4 per cent) from 593 in 1991 to 561 in 1992. The sex ratio was 107.8 male births for every one hundred female births, compared with 112.0 for all South Australian births. The median age of Aboriginal mothers, for all confinements, was 23.8 years, compared with 28.7 years for all South Australian confinements.

Live Births and Confinements by Aboriginality

	Aboriginal births and confinements			*Aboriginal mothers*	*Total births*
Particulars	*1990*	*1991*	*1992*	*1992*	*1992*
Births:					
Males	279	306	291	242	9,957
Females	309	287	270	216	9,354
Total	*588*	*593*	*561*	*458*	*19,311*
Sex ratio *(a)*	90.3	106.6	107.8	112.0	106.4
Confinements:					
Median age of mother	23.6	24.0	24.1	23.8	28.7
Median age of father *(b)*	26.6	27.7	26.9	26.8	31.4

(a) The number of male live births per 100 female live births. *(b)* Where paternity was acknowledged.

Deaths

There were 107 deaths of Aboriginal persons usually resident in South Australia in 1992. Of these deaths, 61 were male and 46 female, which represents a sex ratio of 132.6 male deaths for every 100 female deaths, compared to 113.7 for the total population.

The median age at death for Aboriginal males was 37.5 years, while the median age for females was 54.0 years. These are significantly lower than the overall State medians of 73.4 and 79.8 years, for males and females respectively. Because of the small number of observations, it is possible that these figures will be subject to wide fluctuations from year to year, although figures for the last three years are relatively consistent.

There were 13 Aboriginal infant deaths recorded in 1992, representing an infant mortality rate of 23.2 deaths per 1,000 live births. This compares with the overall South Australian rate of 6.1.

Deaths by Aboriginality

Particulars	Aboriginal deaths 1990	Aboriginal deaths 1991	Aboriginal deaths 1992	Total deaths 1992
Males	74	79	61	5,812
Females	44	56	46	5,113
Persons	*118*	*135*	*107*	*10,925*
Sex ratio *(a)*	168.2	141.1	132.6	113.7
Median age at death (years):				
Males	42.0	45.1	37.5	73.4
Females	57.0	49.8	54.0	79.8
Infant deaths:				
Number	11	12	13	117
Rate *(b)*	18.7	20.2	23.2	6.1

(a) The number of male live births per 100 female live births. *(b)* Per 1,000 live births.

Hospital separations

Of the 379,609 separations recorded in 1991, 7,487 (2.0 per cent) were recorded as Aboriginal. Excluding separations for haemodialysis this represents a separation rate of 426.6 per 1,000 estimated resident population compared with a rate of 250.9 for the total population. During 1991, 42.6 per cent of Aboriginal separations were persons aged less than 25 years compared with 24.1 per cent for total separations in this age group.

Aboriginal Separations[(a)] : Principal Diagnosis by Sex, 1991

Principal diagnosis	Aboriginal separations 1990	Aboriginal separations 1991	Separation rates (b) Aboriginal 1990	Separation rates (b) Aboriginal 1991	Separation rates (b) Total 1990	Separation rates (b) Total 1991
Infectious and parasitic	182	256	11.6	16.0	3.7	3.5
Neoplasms	118	116	7.5	7.2	14.8	15.4
Endocrine, nutritional, metabolic, immunity	157	177	10.0	11.0	3.3	3.6
Blood and blood forming organs	38	32	2.4	2.0	2.5	2.6
Mental disorders	371	367	23.6	22.9	6.7	6.7
Nervous system and sense organs	469	469	29.8	29.3	15.1	15.1
Circulatory system	306	336	19.4	21.0	21.0	21.6
Respiratory system	907	898	57.6	56.1	21.3	19.8
Digestive system	660	644	41.9	40.2	31.2	32.2
Genito-urinary system	361	324	22.9	20.2	19.4	19.6
Pregnancy, childbirth, and the puerperium	689	676	43.8	42.2	23.8	24.0
Skin and subcutaneous tissue	284	280	18.0	17.5	5.5	5.2
Musculoskeletal system and connective tissue	199	229	12.6	14.3	21.1	19.8
Congenital anomalies	70	65	4.4	4.1	2.1	2.1
Perinatal	102	80	6.5	5.0	2.4	2.5
Symptoms, signs and ill-defined conditions	682	521	43.3	32.5	15.4	14.2
Injury and poisoning	1,049	1,021	66.6	63.7	23.8	23.1
Supplementary classifications	725	968	11.5	19.6	19.9	19.7
Total (c)	*7,391*	*7,487*	*442.3*	*426.6*	*253.3*	*250.9*

(a) As recorded by the Inpatient Separations Information System of the SA Health Commission. *(b)* Per 1,000 of the relevant population. Rates for supplementary classifications and the total exclude haemodialysis. *(c)* Includes separations for patients whose principal diagnosis is not known.

Chapter 5

SOCIAL ENVIRONMENT

5.1 LAW, ORDER AND PUBLIC SAFETY

Law and administration

The law in force in South Australia consists of:

- so much of the common law of England and such English statute law as came into force on the original settlement of the colony in 1836;
- Acts passed by the Parliament of the State of South Australia, together with regulations, rules, orders etc. made thereunder;
- Acts passed by the Commonwealth Parliament within the scope of its allotted powers, together with regulations, rules, orders etc. made thereunder;
- Imperial law applying to South Australia as part of the British Commonwealth, as part of Australia or as a State – subject, since 1931, to the Statute of Westminster (this relates mainly to external affairs or matters of Imperial concern); and
- Case law (this consists of judicial decisions of the English, Commonwealth or State Courts, respectively, and represents an important part of the law in force in South Australia).

The scope of Commonwealth legislation is limited to the subjects specified in the Commonwealth Constitution. In some cases Commonwealth government powers of legislation are exclusive of, in others concurrent with, those of the State. In all cases of conflict, valid Commonwealth laws override State laws.

Attorney–General's Department

The role of the Attorney–General's Department is the provision of efficient legal and associated services to the Attorney–General, other Ministers of the Crown, Government departments and to specified public authorities.

The Attorney–General, who is a member of State Parliament and a Minister of the Crown, is the first law officer of the Crown in South Australia. The Attorney–General initiates and defends certain proceedings by and against the State as *parens patriae*. The Attorney–General also administers Acts of Parliament relating to justices, coroners, land titles, equal opportunity, business names, and the Electoral Commission.

The Solicitor–General, at the request of the Attorney–General, acts as counsel for the Crown as well as providing formal legal advice to the Attorney–General, the Premier and to the State Government and its agencies.

In February 1989, the State Government approved the separation of the roles of the Crown Solicitor and the Chief Executive Officer. Under the new arrangements, the Chief Executive Officer has special responsibility for policy advice and development in the areas of responsibility of the Attorney–General's portfolio. The Crown Solicitor remains responsible for the Crown's professional legal practice and for the management of the Crown Solicitor's Office.

In July 1992 the first Director of Public Prosecutions (DPP) was appointed in South Australia. The DPP is responsible for prosecution policy in the State and has assumed responsibility for the laying of information in the case of indictable offences.

The Parliamentary Counsel is responsible to the Government for the preparation of all legislation initiated by the Government.

As part of the State Government's Public Sector Reform Agenda a Department of Justice will be established incorporating the Attorney–General's Department and other related agencies yet to be determined.

Courts

Supreme Court

The Supreme Court is the superior court of record in and for the State and is constituted by the Chief Justice and puisne judges and the masters appointed under the *Supreme Court Act 1935*. The Supreme Court is a court of law and equity and is vested with jurisdiction in civil, criminal, testamentary, land and valuation, admiralty and appellate causes or matters. The Supreme Court Rules made by the Judges under the power contained in the Act regulate the practice and procedure of the Court.

The Supreme Court has unlimited civil and criminal jurisdiction, except in respect of matters which are reserved for the original jurisdiction of Commonwealth Courts which may, under recent legislation, transfer matters in appropriate cases to the Supreme Court.

Persons charged on information must be tried before a jury except where an accused person has elected to be tried before a judge alone.

In its appellate jurisdiction the Court corrects errors of the lower courts and interprets and expounds the law. Subject to leave being granted, appeals lie from decisions of the Supreme Court to the High Court of Australia.

The Supreme Court in its testamentary causes jurisdiction is the only authority competent to grant probate of the will, or administration of the estate, of any deceased person who leaves real or personal property in the State.

District Court

The District Court is the intermediate court and is constituted by a Chief Judge, Judges and Masters appointed under the District Court Act and Commissioners appointed under the Planning Act. Judges also hold commissions to sit in the Children's Court, the Administrative Appeals Division and the Commercial Tribunal. The District Court sits in Adelaide in its Civil, Administrative Appeals, Criminal Injuries Compensation and Criminal Divisions. It also holds civil circuits at Berri, Port Lincoln, Port Pirie, Mount Gambier and Whyalla and criminal circuits at Mount Gambier and Port Augusta.

Supreme and District Criminal Court Appearances
Major Charges and Case Outcomes, 1991

Charge	Total charged	Outcome		
		Guilty as charged	Acquitted or discharged	Other (a)
Offences against the person (b)	343	137	106	100
Robbery and extortion	135	89	23	23
Sexual offences	253	86	121	46
Drug offences	366	273	56	37
Fraud and deception	164	98	45	21
Breaking and entering	281	221	33	27
Other offences (c)	401	260	88	53
Total	*1,943*	*1,164*	*472*	*307*

(a) Includes not guilty on the grounds of insanity and guilty of a lesser or different charge.
(b) Includes murder, manslaughter, causing death by dangerous driving.
(c) Includes arson, larceny, receiving and malicious damage.

The District Court has the same civil jurisdiction (both at law and in equity) as the Supreme Court. In general terms, the District Court entertains claims in actions relating to personal injury or property damage or loss caused by, or arising out of the use of a motor vehicle where the sum claimed exceeds $60,000 and in any other action where the sum claimed exceeds $30,000.

The Court has jurisdiction to try a charge of any offence except treason or murder, or conspiracy or attempt to commit, or assault with intent to commit, either of those offences, and has any other criminal jurisdiction conferred by statute.

Magistrates Courts

The *Magistrates Court Act 1991* established a new Magistrates Court of South Australia as a court of record having Statewide jurisdiction. This replaced the existing, geographically based, Local Courts and the Courts of Summary Jurisdiction. The new Court maintains district registries.

The Court is divided into three Divisions, namely:

- Civil (General Claims) Division;
- Civil (Minor Claims) Division; and
- Criminal Division.

For the purposes of the Summary Procedure Act, the Court, in its Criminal Division, is a Court of Summary Jurisdiction. Within its civil jurisdiction the court is empowered to hear and determine actions at law or in equity for a sum of money where the claim does not exceed $60,000 in relation to actions for damages or compensation for injury, damage or loss caused by, or arising out of, the use of a motor vehicle, or $30,000 in all other cases. It may also hear and determine an action at law or in equity to obtain or recover title to, or possession of, real or personal property not exceeding in value a sum of $60,000 and to hear or determine interpleader actions where the value of property to which the action relates does not exceed $60,000. It is open to parties to an action to waive any monetary limit on the civil jurisdiction of the court.

The minor claims jurisdiction includes monetary claims for $5,000 or less, an application under the Fences Act not involving a monetary claim exceeding $5,000, and neighbourhood disputes based on allegations of trespass or nuisance. Such claims are the subject of a trial taking the form of an inquiry by the court into the matters in dispute, rather than an adversarial contest. They are dealt with according to equity, good conscience and the substantial merits of the case, without regard to technicalities and legal forms.

In its criminal jurisdiction the Magistrates Court has power to conduct a preliminary examination of the charge of an indictable offence, to hear and determine a charge of a minor indictable offence, and to hear and determine any charge of a summary offence.

Children's Court

Proceedings in the Children's Court are regulated by the *Children's Protection and Young Offenders Act 1979* which relates to persons who are less than 18 years of age.

Juvenile Offenders, Type of Offence, 1991

Offence type	*Children's Court (a)*	*Children's Aid Panels (a)*	*Total offences*
Offences against the person	339	246	585
Robbery	66	11	77
Sexual	32	19	51
Drugs	262	422	684
Break and enter	638	402	1,040
Other property offences	1,305	2,866	4,171
Driving and traffic	55	114	169
Drunk and disorderly, other liquor, offensive behaviour, unlawfully on premises	274	404	678
Other offences	112	197	309
Total	*3,083*	*4,681*	*7,764*

(a) The numbers for the Children's Court represent finalised cases, whereas for Children's Aid Panels they represent all appearances.

A screening panel decides whether a young offender who has admitted an allegation appears before a non–judicial tribunal, called the Children's Aid Panel, or a Children's Court. Most first offenders are referred to an Aid Panel.

The Children's Court may not try homicide offences. In cases of very serious offences or persistent serious offending, an order for the child to be tried in an adult court may be obtained. A child may elect to be tried as an adult and, if found guilty, be subject to the penalties set by the Children's Court.

The Children's Court also deals with neglected children where the Chief Executive Officer of the Department for Family and Community Services applies for a declaration that a child is in need of care and should be placed under the guardianship of the Minister of Family and Community Services.

Coroners Court

The principal function of the office of Coroner is the detection and deterrence of secret homicide. The Coroner performs an investigative role into both natural and unnatural deaths, and examines deaths related to civil matters, *e.g.* workers compensation. Although from time to time the Coroner has been given a criminal jurisdiction, this is not currently the case.

The Coroner also inquires into the causes and origins of all fires causing damage to persons or property and into the disappearance from or within the State of any person.

Jury system

The procedure in relation to juries is governed by the *Juries Act 1927*. Indictable offences are tried before a judge and twelve jurors sitting in the criminal jurisdiction of either the Supreme Court or District Court, depending on the gravity of the offence. From 1985 the Juries Act provides that an accused may elect, in accordance with the Rules of Court, to be tried by a judge alone.

The areas of the Adelaide, Northern and South Eastern Jury Districts are fixed by proclamation pursuant to the Juries Act and a jury list is compiled annually for each jury district. The names of persons included in the list are selected by computer process from the appropriate House of Assembly electoral rolls at the direction of the Sheriff. The jurors summoned to hear and determine an issue are later selected by ballot. Accused persons and the Crown each have the right to challenge three jurors without assigning reasons.

Liquor licensing authority

The licensing of hotels and other outlets to sell liquor is governed by the *Liquor Licensing Act 1985*, which came into effect on 1 July 1985 under which is constituted a licensing authority, consisting of a Licensing Court Judge and a Liquor Licensing Commissioner. Licences are divided into two categories as follows:

Category A	*Category B*
hotel licence	club licence
retail liquor merchant's licence	producer's licence
wholesale liquor merchant's licence	residential licence
entertainment venue licence	restaurant licence
general facility licence	limited licence

All matters concerning Category B licences, and some matters relating to Category A licences, are determined by the Liquor Licensing Commissioner. The Licensing Court Judge determines the remaining matters relating to Category A licences and any applications for review of a decision of the Commissioner, who is also responsible for the administration of the Act.

Licence fees, except for limited licences, are assessed as a percentage of the value of liquor purchases (or in some cases sales) during the previous twelve months.

Bankruptcy

Since 1928 bankruptcy has been under Commonwealth Government jurisdiction. Under the *Bankruptcy Act 1966* (Cwlth) South Australia is a bankruptcy 'district' and jurisdiction is exercised by the Federal Court of Australia. Bankruptcy proceedings can be instituted either by a debtor filing his or her own petition or by a creditor issuing a creditor's petition whereupon the Federal Court may make a sequestration order against that debtor's estate. Bankrupts are entitled to an automatic discharge from bankruptcy on the expiration of three years from the date the statement of affairs was filed, unless granted an earlier discharge by their trustee, or an objection has been filed with the Registrar in Bankruptcy.

In 1991–92 there were 2,031 bankruptcies declared, an increase of 378 over the previous year, and 709 more than the number of bankruptcies declared in 1989–90.

Consumer protection

Consumer protection in South Australia, in common with the other States, is a responsibility divided between the Commonwealth and State Governments. The major arm of Commonwealth responsibility is the Trade Practices Commission and the relevant State agent is the Commissioner for Consumer Affairs, who is represented by the Office of Fair Trading, a Division of the Department of Public and Consumer Affairs.

Consumer law in South Australia has been consolidated and rationalised to include a greater range of sanctions against unfair trading practices and to place greater emphasis on the promotion of fair trading. Commonwealth provisions dealing with misleading and deceptive conduct are incorporated within South Australian legislation, and extend to cover all businesses.

The State Ombudsman

The Office of Ombudsman is established under the *Ombudsman Act 1972*. The Ombudsman is able to investigate complaints about administrative actions of State Government Departments, State statutory authorities and local councils. The Ombudsman is not able to investigate complaints about the actions of the police, Ministers, Cabinet, or decisions of courts.

A person or organisation making a complaint is expected to be directly affected by the action which is the subject of the complaint, and would also be expected to have made reasonable efforts to resolve the matter before approaching the Ombudsman. Complaints may be made by telephone, personal visit or in writing. The Ombudsman has substantial powers to investigate a complaint and may recommend remedial action by the agency, if considered appropriate. There is no charge for an investigation by the Ombudsman. The complainant is advised of the outcome of the investigation.

The State Ombudsman also has the responsibility to conduct external reviews of determinations made by agencies under the *Freedom of Information Act 1991* and the *Local Government (Freedom of Information) Amendment Act 1991* and, can direct agencies to make a revised determination in the terms specified by the Ombudsman if he considers that the determination was not properly made.

The Ombudsman is also an appropriate authority where the disclosure of public interest information relating to a public officer (other than a member of the police force or a member of the judiciary) may be made for the purposes of the *Whistleblowers' Protection Act 1992*.

During 1992–93 the Ombudsman received 2,478 complaints and 23 applications for review under the Freedom of Information legislation.

Equal Opportunity Commission

The Commissioner for Equal Opportunity is responsible for the administration of the *Equal Opportunity Act 1984*, the *Sex Discrimination Act 1984* (Cwlth), the *Racial Discrimination Act 1975* (Cwlth) and has statutory responsibilities in relation to the *Local Government (Management Provisions) Act 1991* and the *Senior Secondary Assessment Board of South Australia Act 1983*.

The Equal Opportunity Commission performs the wide range of functions which flow from those statutory responsibilities. They are detailed in the various Acts and involve:

- fostering and encouraging amongst members of the public informed and unprejudiced attitudes with a view to eliminating discrimination on the grounds covered by the Equal Opportunity and Human Rights legislation;
- providing expert advice and assistance on the principles and application of the Equal Opportunity and Human Rights laws to facilitate the participation of citizens in the social and economic life of the community;
- the prevention of certain kinds of discrimination based on sex, marital status, pregnancy, sexuality, race, physical disability, intellectual impairment and age in all areas of public life through the enforcement provisions as defined in the Equal Opportunity Act, the Sex Discrimination Act and the Racial Discrimination Act;
- the prevention of sexual harassment and victimisation through the enforcement provisions as defined in the various Acts;
- the institution and conducting of inquiries concerning alleged contraventions of the Equal Opportunity Act with the approval of the Minister on referral from the Equal Opportunity Tribunal;
- instituting, promoting or assisting in research, the collection of data and the dissemination of information relating to the Equal Opportunity and Human Rights laws;
- making application to the Equal Opportunity Tribunal for the granting, renewal or revocation of an exemption from any of the provisions of the Equal Opportunity Act;
- appearing before and giving evidence to the Equal Opportunity Tribunal and/or the Human Rights and Equal Opportunity Commission on applications for exemption from the provisions of the relevant Acts;
- reporting to the Minister and Parliament on the operation and administration of the Equal Opportunity and Human Rights laws;
- making recommendations to the Minister as to reforms, whether of a legislative nature or otherwise to further the objects of the Acts administered;
- providing expert advice to Local Government on the development and implementation of equal employment opportunity plans in all Councils in South Australia;
- chairing the Local Government Equal Employment Opportunity Advisory Committee established by the Local Government Act to monitor the implementation of equal employment opportunity plans in Councils;
- participating in and providing advice as a statutory member of the Senior Secondary Assessment Board of South Australia on all the legislative functions required of the Board in the provision of curriculum, assessment and certification services for students at the senior secondary level of education, and on the management and operation of the South Australian Certificate of Education.

Legal Services Commission

The Legal Services Commission, constituted under the provisions of the *Legal Services Commission Act 1977*, is responsible for the provision of legal assistance in South Australia.

The Commission is an independent statutory body with representation from State and Commonwealth Governments and a variety of groups in the community. The staff of the Commission provide free advice and minor assistance in any matter.

Legal assistance of a substantive nature is subject to a means test, a merit test and to other guidelines laid down from time to time. It may be provided by staff lawyers or by the private legal profession on assignment. Other services include a telephone advice service and publications and training courses about the law for the general public. The Commission has a central office and regional offices in Elizabeth, Port Adelaide, Modbury, Noarlunga and Whyalla.

Public Trustee

The Office of Public Trustee was established in 1881 and is regulated by the *Administration and Probate Act 1919*. The Public Trustee provides a service to the public by preparing wills, administering estates, and protecting infants and absentee beneficiaries in estates administered by private administrators. A person may appoint the Public Trustee to be the executor and trustee of a will or the trustee of any disposition of property creating a trust.

Trust Funds have grown from $2,800 (£1,400) in 1881 to $354 million at 30 June 1993.

Wills which appoint the Public Trustee as executor and which are held in safe custody number more than 152,000. Approximately thirty per cent of all deceased estates in South Australia are administered by the Public Trustee.

Police and correctional services

Australian Federal Police

The Australian Federal Police, established in 1979, is the major law enforcement agency of the Commonwealth Government. It investigates breaches of Commonwealth law and also has the responsibility for all policing in the Australian Capital Territory. Its priority areas are investigation into drug trafficking, all organised crime, major fraud and specific references from the Government (*e.g.* organised crime). It assists Royal Commissions as well as participating in joint State Police Force and/or other law enforcement agency task forces. Its members are stationed in every State/Territory, as well as in many overseas locations.

South Australian Police Force

The police force was first established in South Australia in 1838 and has been administered by a Commissioner of Police since 1840. Since that time the Force has grown to such an extent that a Deputy Commissioner, four Assistant Commissioners and a Director have been introduced. Each Assistant Commissioner has control of one of four major areas of the Force which have been designated Operations, Personnel, Crime and Services. The Director has control of the fifth major area of the force designated as Corporate Services Command.

Police Personnel, at 30 June

Personnel	*1991*	*1992*	*1993*
Executive officers *(a)*	50	50	51
Inspectors	74	79	79
Sergeants	632	641	652
Constables *(b)*	3,000	3,004	3,001
Total	*3,756*	*3,774*	*3,783*

(a) Includes superintendents.
(b) Includes trainees, cadets, probationary constables and police aides.

The objectives of the South Australian Police Force include the preservation of civil order; the protection of persons and property; the prevention or reduction of the incidence of crime; the provision of assistance to the community on general police matters; the provision for the general security of the State, and the provision of emergency services in disaster situations.

Offences

The following crime statistics are compiled from Criminal Offence Reports which were completed for offences which became known to the police during 1991–92 and should be regarded only as an indication of changing levels of criminality.

Total Offences Reported or Becoming Known to Police 1991–92

Offence type	*Number of offences*	*Number of offences cleared*	*Number of offenders involved in cleared offences*
Homicide	77	72	82
Assault	11,674	8,602	5,955
Sexual assault	2,515	1,535	762
Robbery	1,600	432	546
Other offences against the person	1,721	1,080	717
Total offences against the person	*17,587*	*11,721*	*8,062*
Break and enter	40,539	3,104	4,250
Fraud, forgery and misappropriation	7,693	3,994	1,858
Receiving and unlawful possession	2,229	2,192	2,198
Motor vehicle theft	12,875	1,620	2,113
Larceny from vehicle	11,449	687	791
Larceny from shop	10,817	7,052	7,534
Other theft	36,313	3,640	3,649
Property damage	24,790	4,244	3,974
Total offences against property	*146,705*	*26,533*	*26,367*
Hinder/resist police	2,106	2,085	2,048
Firearm/weapon offences	2,008	1,995	1,924
Disorderly/offensive behaviour	5,342	4,261	4,152
Drug offences	3,749	3,714	3,610
Drink driving offences	7,298	7,298	7,262
Other offences against public order	11,453	9,641	9,325
Total offences against public order	*31,956*	*28,994*	*28,321*
Total recorded offences	**196,248**	**67,248**	**62,750**

Crime prevention

In line with the increased emphasis placed upon involving the community in crime prevention programs, the South Australian Police Department is currently pursuing the following programs:

Watch programmes;
- Business
- Coast
- Hospital
- Mobile
- Neighbourhood
- Reserve
- River
- Rural
- School
- Taxi
- Transit

Blue Light
Crime Mapping
DARE (Drug Abuse Resistance Education)
Driver Education and Traffic Safety
Gotcha Car
Home Assist Scheme
Local Together Against Crime participation
Northern Radio Police Beat
Open Day, Community Care Weeks
Operation Graffiti
Operation NOAH
Operation PARADOX
Operation COG
Police Aboriginal Aide Scheme
Police Deputies Club
Police Rangers
Problem Orientated Policing
Safety Beat
Safety House
School Education Programme
Security Advice
Stop Auto Theft

Correctional services

Prisons

There are eight gaols and prisons administered by the South Australian Department of Correctional Services. In addition, police prisons situated mainly in the more remote country areas serve as short–term detention centres for both males and females on behalf of the Department of Correctional Services. James Nash House, situated in the grounds of Hillcrest Hospital, accommodates the criminally insane and those undergoing short–term psychiatric care and assessment. This hospital is administered by the Department of Correctional Services and staffed by trained medical personnel from the South Australian Health Commission and provides specialised treatment programs for both males and females.

Home Detention, a scheme introduced in 1987, allows selected prisoners who have served at least one–third of their non–parole period, or those serving a sentence of less than twelve months to complete the last part of their sentence in an approved residence in the community under close supervision. Persons charged before a court may request that Home Detention be granted as an alternative to being remanded in custody.

During 1991–92 new cottage accommodation (76 bed spaces) was completed for low security prisoners at Northfield, Cadell and Port Augusta. These accommodation projects are to encourage prisoners to develop essential living skills, including cooking and cleaning, before their release.

Prisons : Numbers of Sentenced Persons Received by Major Offence Type

Major offence type	1989–90 Persons	1989–90 Per cent	1990–91 Persons	1990–91 Per cent	1991–92 Persons	1991–92 Per cent
Homicide	19	0.6	17	0.6	14	0.3
Assault	250	8.5	251	8.9	310	6.0
Sexual assault	48	1.6	44	1.6	45	0.9
Robbery and extortion	41	1.4	52	1.8	64	1.2
Fraud and forgery	83	2.8	78	2.8	109	2.1
Theft, break and enter	471	16.0	483	17.2	585	11.3
Property damage	74	2.5	58	2.1	158	3.1
Driving and related offences	752	25.6	585	20.8	(a)1,321	25.6
Drink driving	304	10.4	405	14.4	796	15.4
Drugs	115	3.9	74	2.6	340	6.6
Against good order	242	8.2	259	9.2	434	8.4
Offensive behaviour	129	4.4	55	2.0	206	4.0
Breach of recognizance, suspended sentence, parole	324	11.0	398	14.1	640	12.4
Other	84	2.9	56	2.0	140	2.7
Total	*2,936*	*100.0*	*2,815*	*100.0*	*5,162*	*100.0*

(a) Increase because of fine default admissions.

Community Corrections

The Community Corrections Division is responsible for providing supervision and social casework services to probationers and parolees. Probation officers provide a professional social work service, including a wide range of treatment and management alternatives for offenders. The Community Service Order Scheme, initiated and administered by the Division, provides participating courts with a further alternative to imprisonment. A Fine Option Scheme allows offenders, who have been fined and are unable to pay, to work out the amount of the fine in community service work as an alternative to prison.

Public safety

State Emergency Service

The South Australian State Emergency Service (SES), formerly the Civil Defence Organisation, was reactivated in 1961 to provide protection for the public against the effects of wartime hostilities. As the threat of war has diminished, the emphasis has shifted progressively towards involvement in counter–disaster measures. The SES is identified as a functional service under the State Disaster Plan.

A Director, who is also a member and Executive Officer of the State Disaster Committee, leads the Service, and is supported by a small permanent staff at State Headquarters in Adelaide, and ten Divisional Offices. Permanent officers are involved in the preparation of counter–disaster plans at all levels, while volunteer members respond to emergency situations on a day–to–day basis throughout the State. These volunteers undertake training to develop their counter–disaster skills. In the main, the courses are conducted by permanent SES staff in South Australia, but some selected persons attend courses conducted at the Australian Emergency Management Institute, Mount Macedon, Victoria.

Road accident prevention

The Department of Road Transport is responsible for the development of road safety policy through one of its organisational units, the Office of Road Safety.

A Road Safety Management and Coordination Group, comprising chief executives from Road Transport, Education, and Police Departments, South Australian Health Commission, Office of Transport Policy and Planning and a nominee of the Local Government Association coordinates a government–wide effort in road safety by the development of a Road Safety Strategic Plan.

The Road Safety Advisory Council remains an advisory body to the Minister of Transport Development and conducts periodic forums on road safety issues.

Road safety programs are conducted and/or implemented by the Department of Road Transport, local government authorities, Police and Education Departments, South Australian Health Commission, and the National Health and Medical Research Council's Road Accident Research Unit.

Fire services

Metropolitan Fire Service

Provision for the establishment and maintenance of fire brigades in South Australia under the control and management of the Fire Brigades Board was first instituted in 1882. In 1981, the Fire Brigades Board was dissolved and the South Australian Metropolitan Fire Service Corporation was established.

The Corporation maintains suitably equipped fire brigades in proclaimed fire districts in the Adelaide Metropolitan Area and in country towns. At 1 July 1993 there were thirty–seven fire brigade stations of which nineteen were metropolitan and eighteen were country. During 1992–93 these brigades received 12,422 calls. Some of these brigades are staffed by permanent personnel and others by auxiliary firefighters.

The expenses and maintenance of brigades are financed in the proportions, three–quarters by insurance companies, one–eighth by the State Treasury and one–eighth by the municipalities and district councils serviced. In 1992–93 the respective amounts provided by these bodies were $36.6 million, $6.1 million and $6.1 million.

Country Fire Service

The South Australian Country Fire Service (CFS) exists to protect life, property and the environment by:

- preventing and suppressing fires and responding to emergencies in areas under CFS Board responsibility;
- promoting public awareness of the threat of fire and other emergencies, fire safety, community responsibility, and legislative obligations when using fire;
- ensuring the right balance of education, prevention, advisory and suppression services;

based on an understanding of their clients and the fire and emergency problems they face.

CFS services an area of 886,000 square kilometres, or approximately 90 per cent of South Australia.

Volunteer members in 449 registered brigades report through a group and regional command structure.

South Australian Country Fire Service

Particulars	*1990*	*1991*	*1992*
Strength of service at 30 June:			
Affiliated organisations	474	466	449
Volunteer members	19,818	19,634	19,026
Fires attended in year ended 30 June:			
Structural/vehicle	774	759	1,265
Rural	3,381	3,197	2,644
Area destroyed in bushfires (ha)	62,200	799,000	227,000
Financial losses ($'000);			
Structural/vehicle	10,717	18,414	27,400
Rural	9,940	20,000	47,000
Total brigade callouts	7,316	6,615	6,395

National Safety Council

The National Safety Council of Australia SA Division Limited is a not–for–profit, non–government, independent, tripartite organisation. Its activities are controlled by a Board of Directors representative of industry, unions, government and the community.

The Council's objectives are to encourage and work for the spread of safety awareness practices throughout Australia, and to be an authoritative source of information, opinion and advice to industry, unions, governments, media and the community.

The Council provides services on a fee–for–service basis in all areas of Health and Safety Consultancy and Training and specialises in the implementation of Systematic Occupational Health and Safety Systems. Training programs and seminars are offered and the sale of posters, publications and materials covering all facets of safety are available. Additionally, the Council offers the NSCA Diploma in Occupational Health & Safety Management.

Finance is derived from membership fees, and the sale of consultancy and training services to members. The Community Safety department receives a small grant from the South Australian Government to assist in community safety projects.

Water safety and life saving

Royal Life Saving Society

The Royal Life Saving Society was established in South Australia in 1909 as a branch of The Royal Life Saving Society Australia. From 1952 it has assumed responsibility for inland waters. It specialises in the teaching of water safety, survival swimming, lifesaving and resuscitation techniques.

In excess of 30,000 (mainly young) persons participate in the Society's programs each year.

The voluntary work of the Society is funded mainly by its own fundraising, donations, sponsorships, membership fees and a government grant.

Surf Life Saving South Australia

Surf Life Saving South Australia was formed in 1952, with the prime objective of supplying a community service of surveillance and rescue patrols at Adelaide's beaches.

The association has eighteen affiliated clubs with a membership joining age of 7 years. The gaining of the Surf Bronze Medallion at 15 years allows men and women the opportunity of serving the community as patrolling members at their respective beaches during the summer season, which is normally from the beginning of November until the end of March.

Surf Life Saving conducts a Surf Safety Programme which educates thousands of school children each year on the dangers of the ocean and environs. Surf's activities are mainly financed by its own fundraising with assistance from government.

VACSWIM

Vacation swimming classes organised by the Education Department were first established in January 1956. The program, previously known as Learn to Swim, was transferred to Recreation SA and is now called VACSWIM. In January each year, the nine day program is provided at more than 200 centres throughout the State. It is available to children from 5 years onwards and is conducted at school pools, public and private pools, lakes, rivers and beaches. Every year, more than 32,000 children take advantage of the summer weather and the free instruction provided by qualified instructors in a controlled environment.

The major aim of the program is to impart water safety knowledge, teach survival and safe swimming skills and to enable children to assist with a rescue by the safest and quickest method available.

Crime and safety

An ABS survey conducted throughout South Australia in April 1991 collected information relating to household and individual experience of crime and perception of neighbourhood crime problems. Details covered included victimisation for selected crimes, and membership of Neighbourhood or Rural Watch.

The survey showed that of the estimated 540,000 households in South Australia in April 1991, 55,600 (10.3 per cent) were victims of at least one break and enter or attempted break and enter in the twelve months prior to the survey. In the same period, 43,100 persons (3.9 per cent) of the estimated 1,119,100 persons aged 15 years or over were victims of at least one robbery or assault.

Households: Victims and Non–victims of Crime[(a)] in the Last 12 Months
Selected Characteristics, April 1991

	Number ('000)			*Proportion (per cent)*		
Particulars	*Victims*	*Non–victims*	*Total*	*Victims*	*Non–victims*	*Total*
Whether a member of Neighbourhood (or Rural) Watch:						
Member	16.4	133.9	150.3	10.9	89.1	100.0
Not a member	34.2	313.9	348.2	9.8	90.2	100.0
Don't know	5.0	36.5	41.6	12.1	87.9	100.0
All households	55.6	484.4	540.0	10.3	89.7	100.0

Households: Victims and Non–victims of Crime[(a)] in the Last 12 Months Selected Characteristics, April 1991 *(continued)*

Particulars	Number ('000)			Proportion (per cent)		
	Victims	Non–victims	Total	Victims	Non–victims	Total
Major statistical region:						
Northern Adelaide	18.2	94.4	112.7	16.2	83.8	100.0
Western Adelaide	11.4	71.7	83.1	13.8	86.3	100.0
Eastern Adelaide	8.4	73.3	81.7	10.3	89.7	100.0
Southern Adelaide	8.8	108.1	116.9	7.5	92.5	100.0
Total Metro	*46.8*	*347.6*	*394.4*	*11.9*	*88.1*	*100.0*
Outer Adelaide, Murray Lands and South East	4.5	79.4	83.9	5.4	94.6	100.0
Yorke and Lower North, Eyre and Northern	4.3	57.4	61.7	6.9	93.1	100.0
Total Ex–metro	*8.8*	*136.8*	*145.6*	*6.0*	*94.0*	*100.0*
All households	**55.6**	**484.4**	**540.0**	**10.3**	**87.7**	**100.0**
Household type:						
Person living alone	13.8	90.2	103.9	13.3	86.7	100.0
Married couple only	12.4	129.1	141.5	8.8	91.2	100.0
Married couple with unmarried child(ren)	16.6	183.6	200.2	8.3	91.7	100.0
One person with unmarried child(ren)	7.2	36.5	43.6	16.4	83.6	100.0
All other households *(b)*	5.7	45.1	50.8	12.0	88.0	100.0
All households	**55.6**	**484.4**	**540.0**	**10.3**	**89.7**	**100.0**

(a) Break and enter or attempted break and enter. *(b)* Also includes all households in caravan parks or camping grounds.

Persons: Victims and Non–victims of Crime[(a)] in the Last 12 Months by Major Statistical Region and Labour Force Status, April 1991

Particulars	Number ('000)			Proportion (per cent)		
	Victims	Non–victims	Total	Victims	Non–victims	Total
Major statistical region:						
Northern Adelaide	10.0	227.8	237.7	4.2	95.8	100.0
Western Adelaide	6.2	164.2	170.4	3.6	96.4	100.0
Eastern Adelaide	7.9	157.3	165.2	4.8	95.2	100.0
Southern Adelaide	10.1	236.0	246.1	4.1	95.9	100.0
Total Metro	*34.1*	*785.3*	*819.4*	*4.2*	*95.8*	*100.0*
Outer Adelaide, Murray Lands and South East	5.6	169.5	175.1	3.2	96.8	100.0
Yorke and Lower North, Eyre and Northern	3.4	121.2	124.6	2.7	97.3	100.0
Total Ex–metro	*9.0*	*290.7*	*299.7*	*3.0*	*97.0*	*100.0*
All persons	**43.1**	**1,076.0**	**1,119.1**	**3.9**	**96.2**	**100.0**
Labour force status:						
Employed	26.8	644.3	671.1	4.0	96.0	100.0
Unemployed	4.3	61.8	66.1	6.5	93.5	100.0
Not in the labour force	12.0	370.0	382.0	3.1	96.9	100.0
All persons	**43.1**	**1,076.0**	**1,119.1**	**3.9**	**96.2**	**100.0**

(a) Robbery or assault.

Further references

Additional information may be found in the following ABS publication:

4509.4 *Crime and Safety, South Australia*

5.2 CULTURE AND RECREATION

A survey of major venues staging music and performing arts events in capital cities in Australia was conducted by the ABS during 1991. The number of Adelaide venues was 14 with a total seating capacity of 21,649.

Peformances and Attendances at Music and Performing Arts Events Held in Major Venues, Adelaide, 1991(a)

	Number of performances	*Total attendances*
		'000
Popular music performances	210	505
Symphony orchestras, chamber and choral groups	190	124
Dance	100	60
Opera and music theatre	370	342
Theatre (excluding opera and music theatre)	530	213
Other performing arts	280	125
Total	**1,680**	**1,369**

(a) Excludes free performances.

The performing arts

Adelaide Festival Centre

The Adelaide Festival Centre is South Australia's major performing arts complex and a major tourist attraction.

Completed in 1975, it contains a 1,978–seat auditorium (complete with hydraulic lift organ) which is suited to both proscenium arch and concert hall presentations. In addition, it offers a highly versatile, 600–seat drama theatre, a performance space suited to regular theatre and cabaret presentations, and a 1,000–seat outdoor amphitheatre. The Centre has two major restaurants and a number of gallery spaces for the display of visual arts.

The Centre is the focal point for the biennial Adelaide Festival of Arts, and houses the administration of the Festival. Between Festivals, the Adelaide Festival Centre presents more than 400 performances per year, generating more than half of the year's average attendances at the complex, totalling approximately 750,000 patrons.

Adelaide Festival of Arts

Founded in 1958 and first held in 1960, the biennial Adelaide Festival is regarded as Australia's foremost arts and cultural event.

The Festival is based in the Adelaide Festival Centre theatre complex, but utilises some forty venues in and around the city to present its three–week program. In 1992 the Festival presented over 2,000 artists from 27 countries, with 796 performances of 250 events – many free of admission charges – bringing attendances of over 700,000.

As a major national tourist and cultural attraction, the Festival receives funding from the South Australian Government, as well as generous support from corporate sponsors. The next Festival, which is to be directed by Christopher Hunt, will be held from 25 February to 13 March 1994.

Adelaide Fringe Inc.

The Adelaide Fringe Festival is produced by the Adelaide Fringe Inc. organisation and takes place every two years alongside the Adelaide Festival of Arts. Since 1960, the Fringe Festival has undergone spectacular growth and now boasts an international profile.

Billed as *The Affordable Festival* in 1992, the Fringe Festival attracted over 3,000 artists to Adelaide and attendances of close to half a million people.

The Adelaide Fringe organisation is also responsible for the Australian International Workshop Festival. On alternate years the Adelaide Fringe coordinates this two week celebration of international master classes, conducted by some of the world's most influential and creative artists.

Come Out Festival

The Come Out Festival, established in 1975, is the largest and longest running Youth Arts Festival in Australia. A unique collaborative celebration which inspires, unifies and challenges the youth of South Australia through involvement in arts experiences and exposure to artistic quality.

The Festival provides excellence, access and participation for young people in each area of Aboriginal arts, dance, music, literature art/craft, theatre and film.

The '93 Festival saw over 2,200 performers presenting 300 performances in the core programme, with over 173,000 young school students involved in Statewide Education Come Out Events.

The Festival is largely supported by government funds.

It is estimated the Festival and its many components reaches more than 400,000 South Australians every two years.

Other performing arts

The State Theatre Company, established in 1965, became a statutory body in 1972. The Company, based at the Playhouse, Adelaide Festival Centre, is South Australia's leading drama company presenting each year a major season of plays, including classics, modern drama, new works from overseas and new Australian writing.

The Adelaide based Meryl Tankard Australian Dance Theatre is South Australia's only professional dance company. Founded in 1965, its aim is to develop contemporary dance in Australia and provide opportunities for developing artists in this field. The company performs regularly in Adelaide and South Australian regional areas, and tours interstate and overseas. As is the case with dramatic theatre, several dance groups perform regularly in the State.

The State Opera of South Australia is one of the State's leading performing arts organisations presenting music and operatic performances ranging from small recitals to grand operas. The Company was established in 1976 as a statutory authority and relies on State Government grants, private sponsorships and box office incomes. Emphasising a varied program throughout its history, the Company has premiered many major works in Australia including Strauss' *Elektra*, Adams' *Nixon in China* and staged works not previously seen in South Australia including Verdi's *Otello* and Cilea's *Adriana Lecouvreur*. Additionally, the Company has a commitment to accessible performances for the general community including the free *Opera in the Park* presentations in Elder Park and

various workshops and performances for school students. The State Opera employs artists of national and international renown, and offers employment opportunities to many local artists both on stage and backstage.

Sponsorship of symphony concerts by the Australian Broadcasting Commission is an important contribution to the musical scene in South Australia. During 1991–92 the Adelaide Symphony Orchestra (ASO) played for two acclaimed land–mark seasons with the State Opera of South Australia – the premiere Australian production of Richard Strauss' *Elektra* and John Adams' *Nixon in China*.

The ASO also provided the musical underpinning of the 1992 Adelaide Festival of Arts with concert performances ranging from Gorecki's *Symphony No. 3* to Bach's *St Matthew Passion*.

Seventy–two concerts were held by the ASO during 1991–92 with a total attendance of 122,882. Over half (65,850) attended free concerts.

Regional arts

The South Australian Country Arts Trust (SACAT) serves the cultural needs of country regions through its five Country Arts Boards. Four of these Boards run theatre complexes in Mount Gambier, Renmark, Port Pirie and Whyalla.

SACAT employs sixteen Regional Arts Development Officers attached to the Boards to support arts organisations, groups and individuals in country regions and to provide information and advice to assist development of the regions' cultural activities.

SACAT coordinates the work of the Boards and provides assistance for locally based arts initiatives and creative projects in the regions. It operates a Touring Program for performing arts and a Touring Exhibitions Program (SATEP) for visual arts.

Carclew Youth Arts Centre

Carclew Youth Arts Centre provides a focus for activities in all art forms for young people, advises the government on youth arts policy, and, through the South Australian Youth Arts Board, allocates grants for companies and individuals working with or for young people.

It also has programs of its own, including Artery Workshops, Cell Music Venue, a band rehearsal room and sound studio, photographic darkrooms, drama classes, holiday programs and exhibitions.

Carclew operates the *Odeon* young people's theatre and promotes and assists professional performances for children and young people.

Adelaide Entertainment Centre

The Adelaide Entertainment Centre opened at Hindmarsh in 1991 to provide a venue for large scale musical entertainment and indoor sports events. It has a seating capacity of 12,000 and in its first 12 months of operation sold 400,000 tickets to 74 performances of 35 acts, ranging from rock bands to operatic tenors; from Disney on Ice to the Monster Truck Invasion.

Visual arts

Art Gallery of South Australia

The Art Gallery of South Australia is a Division of the South Australian Department for the Arts and Cultural Heritage. Its operations are assisted by the Art Gallery of South Australia Foundation, which helps raise substantial funds towards major acquisitions, and by the Friends of the Art Gallery of South Australia. The Gallery's annual program of changing exhibitions has been supported from 1990 to 1993 by a major sponsorship from Santos Ltd.

The Gallery's holdings include paintings, sculptures, prints, drawings, photographs and decorative arts. The collections are broad and include a fine representative selection of Australian, European and Asian art, including one of the finest South–East Asian ceramic collections. Holdings have been enriched over time through bequests and gifts, while the State Government makes an annual grant to the Gallery for the purchase of works of art.

Works by established European and Australian artists are always on display as well as changing displays of contemporary art. South Australian art is well represented and is featured throughout the Gallery's displays. Besides its own exhibitions, the Gallery's programming includes major national and international touring exhibitions.

Lion Arts Centre

Framing the entry to the new Lion Arts Centre is the historic Fowler's Lion Building (1906). Located on this site is a mix of arts activities including first release and specialised exhibition at the Mercury Cinema, Doppio Teatro–bilingual theatre and a variety of exhibition and performances spaces including the Experimental Art Foundation, Mutlicultural Artworkers Committee's Nexus venues and the Lion Theatre and Bar.

Also located on the site is the Jam Factory Craft and Design Centre. The Centre comprises five interrelated activity areas for the development and support of the crafts in South Australia. These are: training workshops (in hot blown glass, ceramics, metal and furniture design); low–rental tenant workshops; a retail craft shop and exhibition galleries.

The aims of the Jam Factory are to foster and promote standards of excellence in craft and design, and to assist designers/makers to develop and maintain financially viable careers as craft practitioners.

Other visual arts venues

Other galleries are operated by a number of organisations and individual proprietors in both metropolitan and country areas including in Adelaide, the Adelaide Festival Centre Trust, the Royal South Australian Society of Arts and the Contemporary Arts Centre.

Media

Film production and festivals

The South Australian Film Corporation (SAFC) was constituted under the *South Australian Film Corporation Act 1972*.

SAFC operations and staff are centred at Hendon in a complex which comprises complete film production facilities of a fully professional standard and the SA Film and Video Centre.

The Media Resource Centre, a non–profit cultural body devoted to the development of an active film culture, offers equipment and editing facilities hire to members. It also administers the Mercury Cinema in the Lion Arts Centre and mounts the Frames: Festival of Film and Video, a leading biennial festival of independent Australian film and video.

Radio

The following table provides a summary of radio stations operating in South Australia at 30 June 1992.

Radio Stations : Type and Location, at 30 June 1992

	Amplitude Modulation (AM)		*Frequency Modulation (FM)*	
Operator	*Metropolitan Adelaide*	*Country*	*Metropolitan Adelaide*	*Country*
Commercial	2	6	*(a)*5	5
Public	2	–	4	*(b)*7
Australian Broadcasting Corporation	3	8	2	28
Total	*7*	*14*	*11*	*35*

(a) Two commercial FM stations operate at two different frequencies and are therefore counted twice.
(b) One public FM station operates at two different frequencies, and is therefore counted twice.

Television

Residents in the Adelaide area have access to Australian Broadcasting Corporation (ABC) television, Special Broadcasting Service (SBS) television and three commercial television services. ABC television is also delivered from terrestrial transmitters to residents outside the metropolitan area. Regional commercial television stations broadcast in the Spencer Gulf, Renmark/Loxton and South East areas. ABC television and one commercial television service is provided *via* satellite to remote residents of South Australia.

The Press

Adelaide has one morning newspaper, *The Advertiser*, which is published from Monday to Saturday, and one Sunday paper, the *Sunday Mail*. *The News*, an afternoon paper which traced its origins to the 1860s, ceased publication in 1992.

The Advertiser was first issued in 1858 as *The South Australian Advertiser* and absorbed *The Register* in 1931. It is distributed throughout the State, with about 75 per cent of its sales being in the metropolitan area. The average weekday circulation of *The Advertiser*, in the six months to 30 March 1993, was 209,716, while the Saturday issue had a circulation of 263,316.

The *Sunday Mail*, printed on Saturday evenings and distributed mainly on Sunday mornings, first appeared under this name in 1955 following a merger between *The Mail*, first printed in 1912, and the *Sunday Advertiser*, which was introduced in 1953. The *Sunday Mail* has a circulation of 308,630, with about 27 per cent of sales being in country districts.

The combined reach of *The Advertiser* and *Sunday Mail* now exceeds 900,000 or 78 per cent of the population of South Australia.

The *Stock Journal*, previously the *Adelaide Stock and Station Journal*, was established in 1904. It is published weekly and provides up–to–date information on stock and wool markets and the technical aspects of farming and property management.

There are about thirty newspapers operating in the State's country areas. Of those still existing *The Border Watch* (Mount Gambier) in 1861 and *The Bunyip* (Gawler) in 1863 were first to appear. District papers printed by Messenger Newspapers Pty Ltd, containing items of local interest, are circulated in a number of suburbs of Adelaide, and a number of community newspapers are published.

A literary monthly, the *Adelaide Review*, is available free of charge through various outlets and has an audited circulation in excess of 38,000.

Libraries

State Library of South Australia

The State Library of South Australia is a Division of the Department for the Arts and Cultural Heritage and is of major significance in meeting present and future information and reading needs of South Australians.

The State Library's services focus on three discrete areas – Research and Information, Heritage and Culture, and Collections and Community. These services are based primarily on the collections of the Bray Reference Library and the Mortlock Library of South Australiana. The community service program delivers services to local communities in areas of health, technology and community arts as well as providing special services to Aboriginal people in South Australia.

The supplement to this edition of the *South Australian Year Book* features the collection of books on wine held by the Rare Books and Special Collections Section.

The State Library of South Australia is governed by the Libraries Board of South Australia which was established to develop and support free library services, to promote cooperation between libraries and to ensure that the community has access to adequate research and information services.

Since 1878, legislation has required that copies of all copyright items published in South Australia be deposited in the State Library. This material, including private archival records, forms the collection of the Mortlock Library. The main objectives of the Mortlock Library are: to select, acquire, secure and preserve recorded information in a variety of formats to document the people, places, events and development of South Australia; and to assist persons and agencies using the collection through the provision of an effective reference service.

The Bray Reference collection comprises about one million items (half of them monographs), with newspapers, periodicals, maps, photographs, audio–visual materials and computerised data bases on CD–ROM forming the remainder of the collection.

The collections and services provided by the State Library of South Australia are available to the general public.

Public libraries

PLAIN (Public Libraries Automated Information Network) Central Services, formerly the Local Government Services Bureau, supports the establishment and promotes the use of public libraries. It administers subsidies for public library operations by providing catalogued bookstock and other library materials, as well as automating all libraries to provide a Statewide network.

In June 1992, 119 authorities were operating 136 public libraries (including 46 school/community libraries), 10 mobile libraries, plus 16 depots under the provisions of the *Libraries Act 1982*.

Local Public Libraries[(a)]

Year	*Libraries at end of year*	*Registered readers (b)*	*Items loaned*	*Stocks at end of year (c)*
1987–88	131	569,681	13,015,951	1,911,253
1988–89	137	604,065	13,356,222	2,012,596
1989–90	135	625,148	13,292,240	2,113,869
1990–91	136	669,148	13,876,524	2,189,100
1991–92	136	712,819	14,610,408	2,276,618

(a) Figures exclude the lending service in the State Library building, formerly part of the State Library and now run by the City of Adelaide. (b) Three year average. (c) Catalogued material only.

Other libraries

Significant specialist libraries are held by tertiary institutions. For example, the University of Adelaide has an extensive law library, while the University of Adelaide and Flinders University have branch libraries for medicine. Many organisations, both public and private, have specialist libraries catering for their particular interests. Parliament House is served by its own Parliamentary Library.

State records

State Records (formerly the Public Record Office of South Australia) is a Business Unit of the Department of State Services and is the official repository for the public records of South Australia. Under its Charter, the unit provides records management advice, records storage and retrieval to all public sector agencies, as well as its archival and public reference functions.

Museums

South Australian Museum

The South Australian Museum is a Division of the Department for the Arts and Cultural Heritage. The aim of the Museum is to increase knowledge and understanding of our natural and cultural heritage. The Museum serves the community by acquiring, preserving, making intelligible and presenting to the public, material evidence concerning people and nature. It provides opportunities for study, education and enjoyment. The South Australian Museum was founded on 18 June 1856, and opened its doors to the public on 2 January 1862.

The Museum has a wide representation of disciplines, but its main work is in the fields of anthropology, natural history and geology. The research of its social scientists primarily involves the study of Australian Aboriginal cultures. The work of its natural scientists involves the identification, classification, description and study of animals and minerals with special emphasis on arid lands and southern waters. The Museum's scientific staff are available for consultative projects and their expertise is sought worldwide.

Many of the Museum's collections are among the finest in existence. Of particular importance are its ethnographic collections of Australian Aboriginal and early Pacific cultures. Its natural history collections of minerals, extinct and endangered Australian animals, birds, insects and marine invertebrates are also significant.

The Museum mounts permanent and temporary exhibitions each year. It has an annual visitation rate of more than 500,000. An Education Service caters for more than 45,000 school students visiting the Museum each year and travelling education exhibitions, serving more than 15,000 students annually, ensure that children throughout the State have access to the Museum's resources. A unique Information Centre answers queries about natural history and anthropology. The Museum Shop is a commercial enterprise which stocks a wide range of merchandise including material developed by the Museum. The Museum has a specialist reference library available for public use. The Friends of the South Australian Museum support the work of the Museum and have been responsible for notable additions to the collections.

Carrick Hill

Carrick Hill was bequeathed to the people of South Australia in 1983 by Sir Edward and Lady Hayward. Carrick Hill is a Division of the South Australian Department for the Arts and Cultural Heritage, and opened to the general public in March 1986 as an art gallery, museum and heritage garden. The Tudor–style mansion houses a fine collection of twentieth century British art and sculpture, together with 17th century oak furniture. The gardens and surrounding park total 39 hectares and provide walks through English formal gardens, with specialist collections of heritage roses and apples. A sculpture park in an Australian bush setting gives generous views of Adelaide. Carrick Hill was visited by 43,000 people in 1992.

The History Trust

The History Trust of South Australia is a statutory authority, established in 1981, responsible for the management of several important museums, including the National Motor Museum, the South Australian Maritime Museum, the State History Centre at Old Parliament House, and the Migration Museum. The History Trust also oversaw the development of the Port Dock Station Railway Museum as a Bicentennial commemorative project.

The State History Centre formulates policy relating to local and specialist museums, provides policy advice and information on historical matters to the community and all levels of Government, administers the Museums Accreditation and Grants Program, the Community History Fund and generally promotes history through publications, workshops, lectures and the mass media. The Museums Accreditation and Grants Program is designed to assist the development of local and specialist museums. A wide range of museums, often based on a particular theme or subject, can be found throughout the State – some are commercially run, although most are the work of groups of dedicated volunteers.

The Trust's information services include advice on the location of historical source material, guidance on research techniques and contact addresses for historical societies and museums. There are over 300 museums, historical societies and National Trust branches in the State. The History Trust and local museums combined are estimated to attract over 1.2 million visitors annually.

Conservation and heritage

Resource, Conservation and Management Group

The Resource, Conservation and Management Group of the Department of Environment and Natural Resources manages South Australia's park system and is responsible for the protection of the State's native animals and plants. Progressive additions to the park system have brought the total area of South Australia's National Parks and Wildlife Act reserves to over 20.2 million hectares which represents almost 21 per cent of the total area of the State. The State's 248 parks and reserves are of crucial value for the protection of natural systems and their biodiversity and cultural heritage. Parks are also an important resource for tourism, recreation and education.

A focus in recent years has been the creation of a comprehensive arid zone park system. Desert lands are no longer regarded as vacant Crown lands, but recognised for their conservation value and wilderness qualities.

Protection of South Australia's wilderness areas is being extended under the Wilderness Protection Act. Responsibility for the conservation and management of the State's natural heritage outside the reserves system is shared between a number of branches of the Resource Conservation and Management Group.

Wildlife research and protection

The National Parks and Wildlife Act provides laws and regulations designed to protect our plants and animals, and administers permit systems for hunting and for the keeping and trading of wildlife. Seized or surrendered animals are kept at the Monarto Fauna Complex, where breeding programs are undertaken to help conserve rare and endangered species. The Department of Environment and Natural Resources is responsible for animal welfare.

To help conserve South Australia's wildlife, biological surveys are carried out to monitor wildlife populations and distribution of species. In recent years species recovery plans have led to the re–introduction of stick–nest rats and brush–tailed bettongs to islands off the South Australian coast.

Introduced pest animals and plants cause enormous economic and environmental loss in South Australia. Consequently the Service is involved in developing measures for the biological control of species such as rabbits, bridal creeper, and boneseed.

Native vegetation

In 1985 the South Australian Government enacted legislation to control the clearing of the State's remaining native vegetation. Controls on clearance and assistance for landholders are now provided for under the *Native Vegetation Act 1991*. The Resource, Conservation, and Management Group works closely with landholders in developing programs for the long–term maintenance of native vegetation. These programs help to prevent the degradation of land which occurs through loss of tree cover, soil erosion and salinity.

Pastoral management

South Australia's pastoral lands cover about 40 million hectares, virtually all of which is located in the far north of the State. In 1989 the government introduced the Pastoral Land Management and Conservation Act to ensure that landcare and sustainability principles are applied in the management and use of pastoral lease land.

Coastal management

South Australia's 3,700 kilometre coastline is an important aspect of the State's natural heritage, as well as being a vital recreational and tourism resource. The Resource, Conservation, and Management Group works with the Coast Protection Board, other government agencies, local councils and community groups to provide technical advice on coastal management issues including development control, and to reduce the risks of erosion or flooding. A dredging and barging operation to replenish the sand on our metropolitan beaches is also carried out.

Aboriginal heritage

The South Australian environment has been influenced by the occupation of Aboriginal people for more than 40,000 years. Evidence of this occupation can be seen in sites of archaeological and mythological significance including campsites, ceremonial grounds, mythological sites, cave paintings, rock engravings, burial places, and ochre mines among other sites. In 1989 the Aboriginal Heritage Act was enacted to provide for the protection of sites of significance to Aboriginal people, Aboriginal remains and artefacts. Since the passing of this Act, local Aboriginal heritage committees and a State Aboriginal Heritage Committee have been established to strengthen the role of Aboriginal communities in identifying, researching and managing their heritage. The Act also requires that a central Register of sites and objects be established for the safe–keeping of information on Aboriginal heritage. The Register is now part of the Culture and Site Services Section of the Department of State Aboriginal Affairs. This Section also administers all other aspects of the Aboriginal Heritage Act.

European heritage

The State Heritage Branch of the Department of Environment and Natural Resources administers the government's programs for conserving South Australia's European cultural heritage under the *South Australian Heritage Act 1978*, the *Historic Shipwrecks Act 1981* and sections of the *Planning Act 1982*. There were 1,722 entries on the Register of State Heritage Items at the end of June 1993.

The Branch identifies heritage items and recommends them for registration. Advice is also provided on changes to registered items and the development of heritage sites for public use. Other important tasks include heritage surveys, maritime archaeology research and promotion of the recreational and educational value of historic shipwrecks.

Artlab Australia

Artlab Australia, specialises in the scientific conservation and preservation of works of art and items of historical, cultural and personal value.

A Division of the Department for the Arts and Cultural Heritage, it was established in 1985 to lead the preservation of the movable heritage of South Australia.

Artlab Australia operates the largest and most advanced conservation facility of its type in Australia. It maintains a series of highly specialised laboratories throughout Australia for the treatment of works on paper, books, paintings, textiles and other artefacts and a scientific analysis unit and fumigation chamber.

As well as being responsible for the conservation and preservation needs of the State's major cultural institutions, Artlab Australia provides a full commercial consulting and treatment service to businesses, community organisations and groups, and private individuals.

The Botanic Gardens and State Herbarium

The Botanic Gardens, established in 1855, now comprises the Adelaide Botanic Garden and Botanic Park in the City, the Wittunga Botanic Garden at Blackwood and the Mount Lofty Botanic Garden. A Board manages the garden system for the community and is responsible to the Minister for Environment and Land Management.

The Botanic Gardens are also responsible for the heritage garden 'Beechwood' at Stirling, maintaining the grounds of Government House and managing the Black Hill Flora Centre for applied research at Athelstone. There are also seven experimental plantations maintained in various parts of the State and technical support is given to the Australian Arid Lands and Botanic Garden at Port Augusta.

The Botanic Gardens fulfil important recreational, educational, information, advisory, and conservation and scientific roles, and the range of sites covered by the Gardens facilitates cultivation of a wide range of plants.

Important features of the Adelaide Botanic Garden include native plants from dry regions, cacti and succulents, the class ground, glasshouse displays and the wisteria arbours.

The Adelaide Botanic Garden also houses the Museum of Economic Botany, a specialist library, the State Herbarium and the Bicentennial Conservatory, the largest glasshouse in the Southern Hemisphere. 'Beechwood' contains the oldest conservatory in Australia and Mount Lofty Botanic Garden is highly regarded as a temperate Australian botanic garden. The Herbarium contains about 800,000 specimens and is the centre of all significant research on native plants of South Australia. It carries out important work in the identification and naming of plants and recording information on plant distribution as well as liaising with other herbaria and scientific institutions.

Although primarily serving the State, the organisation has strong links with other Australian and overseas botanic gardens, being active in promotion of commercial use of plant products and plant biodiversity conservation.

Some 16,000 schoolchildren used the education service, over 28,000 inquiries were made of the advisory service and an estimated one and a half million visitors went to all gardens in 1992, including 888,264 to Adelaide Botanic Garden.

Adelaide Zoo

The Adelaide Zoo is administered by the Royal Zoological Society of South Australia Inc., a non–profit society with more than 4,000 members. Revenue for maintaining and developing the Zoo comes mainly from gate receipts, fund–raising through sponsorship programs and an annual State Government grant through the Department of Environment and Land Management.

Adelaide Zoo has as its major goals public education and recreation and the conservation and study of rare and endangered species. Two full–time Education Officers conduct education programs for students and assist in interpreting the Zoo as a living classroom for visitors.

Although Adelaide Zoo is small in area (only 8 hectares) it contains an excellent collection of mammals, birds and reptiles exhibited in open–plan naturalistic habitats. Two walk–through aviaries, a children's zoo, a nocturnal house and reptile house are important features.

At 30 June 1993, 1,300 specimens of 274 species were on display. About 380,000 people visited the Zoo during the year ending 30 June 1993.

The Society also operates a 1,000–hectare Zoological Park at Monarto, 70 kilometres east of Adelaide which opened to the public in October 1993. Approximately 200 hectares are devoted to the breeding and display of rare animals particularly herds of grazing animals with the balance being dedicated to the conservation and display of indigenous fauna and flora.

Recreation and sport

Recreational space and facilities

The City of Adelaide is surrounded by 693 hectares of parklands. These contain sporting facilities, which have mainly been developed by user organisations, on annual, seasonal permit or long–term lease. Lease facilities include national and regional standard venues such as the Adelaide Cricket Oval, Memorial Drive Tennis Club, Victoria Park Horse Racing Track, The Adelaide Aquatic Centre and part of the Australian Formula One Motor Racing Track.

The parklands are also extensively used by individuals and groups from wider Adelaide and tourists for a wide range of casual and organised activities such as walking and cycling (commuting and recreational), major community events, arts festivals, exhibitions, concerts and family picnics.

The parklands Programmes include not only cultural and recreational activities, but also sports from local community activity to major international events such as Rio Tennis, World Title Boxing, Test Cricket and Rugby League.

Facilities and open space for a wide range of sporting and leisure activities are located throughout the metropolitan area and most country towns have ovals and other sporting facilities.

Recreation, Sport and Racing

The Division of Recreation, Sport and Racing was established to support community efforts to develop and promote recreation and sporting opportunities for all South Australians. Most of its community services are provided by Recreation SA, and the Division of Sport, incorporating the South Australian Sports Institute (SASI). The Racing Division administers the Racing Act.

Division of Sport

The aims of the Division of Sport in South Australia are the promotion and development of sport in this State.

A part of the Division of Sport is the South Australian Sports Institute, which operates in the area of elite athlete development through the provision of scholarships and specialist support services.

The Sports Division offers programs in the areas of sports funding, coaching, sport development, junior sport development, sport physiology and psychology, as well as providing a specialist sports library and coaching resource centre.

Recreation SA

Recreation SA is responsible for the provision, promotion and development of active recreation and leisure opportunities for all South Australians.

Recreation SA offers programs in recreation development, including a community grants program, development of outdoor recreation facilities including the world famous 1,500 kilometre Heysen Trail, Mawson and Riesling Trails and other walking and cycling trails, State association professional development, playground and children's recreation development, annual VACSWIM program for 32,000 participants, and recreation policy and planning.

Major sporting events

A large number of sporting and recreational events take place in South Australia on a regular basis attracting local, interstate and overseas visitors.

A round of the World Formula One Grand Prix has been held in Adelaide each year since 1985. The event is staged on a street circuit in the eastern part of the City of Adelaide and surrounding parklands with a lap distance of 3.78 kilometres. The Australian Formula One Grand Prix is seen by some 120,000 people on the track and by a worldwide television audience.

Other major sporting events with more local appeal include the Oakbank Race Meeting at Easter, the Adelaide Cup in May and the South Australian National Football League Grand Final in October.

Gambling

Legal gambling in South Australia is regulated by the Lottery and Gaming Act, the Soccer Football Pools Act, the Racing Act, the State Lotteries Act and the Casino Act.

At June 1993 there were 634 Lotteries Commission agents operating (mainly from shops) and total sales of the Commission for the year were $256.3 million.

At 30 June 1993 there were 64 bookmakers and 634 clerks and agents licensed with the Bookmakers Licensing Board operating on– and off–course betting on horse racing, harness racing, greyhound racing, foot running and approved sporting events.

Totalisator betting takes place through the Totalizator Agency Board (TAB) and on–course totalisators licensed by racing clubs. Off–course betting was provided on galloping, harness racing and greyhound meetings. In addition, betting was provided on Australian Rules Football and the Australian Formula One Grand Prix. The following table shows turnover for the last three years for these forms of legal gambling in South Australia.

Legal Gambling Turnover
($ million)

Type of gambling	Turnover 1990–91	1991–92	1992–93
TAB:			
Racing codes	491.7	494.5	503.2
Other sporting events	1.9	1.8	1.8
Total TAB	*493.6*	*496.3*	*505.0*
On–course totalisator	69.0	58.6	n.y.a.
Bookmakers:			
On–course	128.7	106.7	97.9
Off–course	7.1	7.8	6.0
Total bookmakers	*135.8*	*114.5*	*103.9*
Lotteries Commission:			
Instant Money Game	43.7	40.4	44.2
Saturday Cross Lotto	98.1	103.1	100.0
Thursday Cross Lotto	36.2	35.5	32.2
Super 66	6.6	5.7	5.5
The Pools	1.5	1.1	1.3
Club Keno	43.0	45.9	56.8
X Lotto Extra	8.8	16.8	16.3
Total Lotteries Commission	*237.9*	*248.5*	*256.3*
Lottery and Gaming Section	87.6	88.3	93.2
Total	**1,023.9**	**1,006.2**	**n.y.a.**

The Adelaide Casino, opened in December 1985, is part of the Adelaide Railway Station redevelopment and the three levels of the Casino include approximately one hundred gaming tables.

In 1991 the Casino was authorised to operate video gaming machines, and 750 machines were installed in a refurbished area.

The Casino is operated by a company appointed by the Lotteries Commission to establish and operate a casino on its behalf. The monies received by the Commission from the Casino operator, representing unclaimed prizes, licence fees and 20 per cent of net gambling revenue, are paid in the proportions of one per cent to the Housing Improvement Fund with the balance to the Consolidated Account. In the year ending 30 June 1993 the amount paid to the Government was $20.0 million.

5.3 HEALTH

Commonwealth Government

The Commonwealth Government has a limited role in health care and is mainly concerned with the formulation of broad national policies, the provision of benefits and grants to individuals and organisations and the regulation of health insurance. Direct services are provided through the Repatriation General Hospital system and the Department of Health, Housing and Community Services through its Rehabilitation Units and Hearing Centres.

South Australian Health Commission

Primary responsibility for the planning and provision of health services lies with the State Government, although policy is influenced by financial arrangements between the Commonwealth and State Governments, by South Australia's budget allocations and by arrangements with local governments and voluntary and private agencies.

The Health Commission maintains, operates and assists a wide range of health services including:

- hospital services;
- mental health services;
- services for the intellectually disabled;
- drug and alcohol services;
- services for Aborigines, the aged, the physically disabled, and children and families;
- community health and health promotion services;
- public health and occupational health services.

The Public and Environmental Health Division is responsible for occupational and environmental health administration. Services carried out in the regulatory, inspectorial, licensing and monitoring functions include Epidemiology and Infectious Disease Control; Health Surveying; Occupational Health and Radiation Control; Pharmaceutical and Hazardous Chemical Control; and the licensing and inspection of private hospitals, nursing homes and rest homes.

Every local government authority is authorised under health and food legislation to maintain regulatory responsibility for public health in its area. The Health Commission has general responsibility for the public health of the entire State.

Health services

The control of hospitals in South Australia is vested in several authorities including the South Australian Health Commission, the Commonwealth Department of Veterans Affairs, religious and charitable organisations, local community committees and private owners.

South Australian Hospitals : Staff and Selected Activities[(a)]

Item	*1989–90*	*1990–91*	*1991–92*
Average staff employed *(a)*	18,032	17,750	17,333
Occupied bed days ('000)	2,329	2,302	2,242
Bed occupancy rate (per cent)	73.0	72.9	72.3
Mean length of stay (days)	6.0	5.8	5.6

(a) Excludes private and Commonwealth hospitals.

The following table shows the details of number of hospitals, hospital beds and separations from 1989–90 to 1991–92. Separations occur when an inpatient or same day patient leaves hospital to return home, transfers to another hospital or dies at the hospital; for psychiatric hospitals, however, the figures refer to admissions.

Summary of Hospital Statistics

Hospital	*1989–90*	*1990–91*	*1991–92*
Public:			
Recognised;			
Number	81	81	81
Average no. of beds available	5,437	5,421	5,281
Separations	264,842	270,987	271,587
Commonwealth;			
Number	2	2	2
Approved beds	336	331	302
Separations	9,847	10,645	12,075
Psychiatric;			
Number	2	2	2
Average no. of beds available	742	718	674
Separations	4,652	4,544	4,318
Private:			
General;			
Number	34	34	34
Approved beds	2,048	2,048	2,067
Separations	(a)108,016	111,334	112,396
Psychiatric;			
Number	4	4	4
Approved beds	208	197	197
Separations	2,156	2,327	2,420
Total:			
Number	*123*	*123*	*123*
Separations	*390,835*	*399,837*	*402,796*
Separations per 1,000 of estimated resident population	*271.6*	*276.3*	*278.5*

(a) Data are for admissions.

Recognised hospitals

Recognised hospitals are those recognised under the Medicare agreement between the Commonwealth and State Governments in relation to the provision of hospital services. The agreement provides for financial assistance towards comprehensive hospital care, including medical treatment for eligible persons.

Of the recognised hospitals sixty–eight are located outside the Adelaide Statistical Division, providing services to local communities from Mount Gambier in the south east, to Oodnadatta in the north, and as far west as Cook. A small number of strategically placed hospitals provide some specialist medical and community health services to the region or sub–region they serve. An increasing number of hospitals are becoming involved in a variety of services including community health, and nursing home and hostel accommodation for the aged.

Of the 13 recognised metropolitan hospitals, five are teaching hospitals through association with a university medical school. These hospitals offer the super–specialities traditionally located at only one or two hospitals in each State (*e.g.* intensive care, burns units, cardiac surgery and neonatal intensive care). Recognised hospitals also provide State–wide services for casualty patients.

Private hospitals

At 30 June 1992 there were 38 private hospitals with 2,264 beds operating within South Australia, either as profit making ventures, or run by charitable or community organisations. Thirty–one of these hospitals are located within metropolitan Adelaide while the remaining seven are in country areas. Four of the metropolitan hospitals provide psychiatric care, one specialising in the treatment of adolescents. The remaining are general hospitals and offer a range of medical, surgical and obstetric services.

Repatriation hospital

The Department of Veterans' Affairs maintains the Repatriation General Hospital, Daw Park, which is an acute care teaching hospital. It also has a Hospice Unit which is administered in conjunction with the South Australian Health Commission. Medical, surgical and psychiatric in–patient and out–patient treatment is provided for eligible veterans and dependants, serving members of the forces and under certain conditions, for non–eligible veterans and civilians.

The Repatriation Artificial Limb and Appliance Centre, also at Daw Park, serves the community's disabled under the Commonwealth Free Limbs Scheme.

Hospital separations

The remaining commentary and data in this section relate to separations from recognised and private hospitals only. From the following table it can be seen that as people age they are more likely to require hospital services. This phenomenon is particularly noticeable for inpatients whose principal diagnosis is related to diseases of the circulatory system or neoplasms.

Separations, Principal Diagnosis By Age, 1991

	Age (years)						
Principal diagnosis	*0–4*	*5–14*	*15–24*	*25–44*	*45–64*	*65 and over*	*Total (a)*
Infectious and parasitic diseases	1,274	602	868	1,088	618	742	5,193
Neoplasms	279	589	685	3,655	7,539	9,584	22,337
Endocrine, nutritional and metabolic diseases and immunity disorders	238	365	366	1,082	1,289	1,842	5,185
Diseases of the blood and blood–forming organs	106	278	462	611	736	1,625	3,818
Mental disorders	26	200	1,294	3,682	2,173	2,308	9,688
Diseases of the nervous system and sense organs	3,963	2,422	922	3,128	3,612	7,733	21,788
Diseases of the circulatory system	51	69	279	2,894	9,676	18,216	31,209
Diseases of the respiratory system	7,192	5,245	2,588	3,948	3,795	5,880	28,663
Diseases of the digestive system	3,035	2,197	6,862	11,368	11,928	11,127	46,543
Diseases of the genitourinary system	660	723	2,922	10,755	7,953	5,326	28,343
Complications of pregnancy, childbirth and the puerperium	–	44	11,075	23,587	31	–	34,743
Diseases of the skin and subcutaneous tissue	336	612	1,119	1,833	1,558	1,998	7,460
Diseases of the musculoskeletal system, and connective tissue	177	684	3,100	9,476	8,463	6,769	28,693
Congenital anomalies	1,367	715	308	346	146	99	2,982
Conditions arising in the perinatal period	3,587	4	3	4	–	4	3,602
Symptoms, signs and ill–defined conditions	1,912	1,172	1,761	4,726	5,506	5,456	20,543
Injury and poisoning	1,986	3,602	6,556	8,964	5,286	6,941	33,369
Supplementary *(b)*	1,605	900	2,099	12,105	11,933	16,236	44,915
Total principal diagnoses (c)	*27,815*	*20,451*	*43,361*	*103,426*	*82,358*	*101,993*	*379,609*

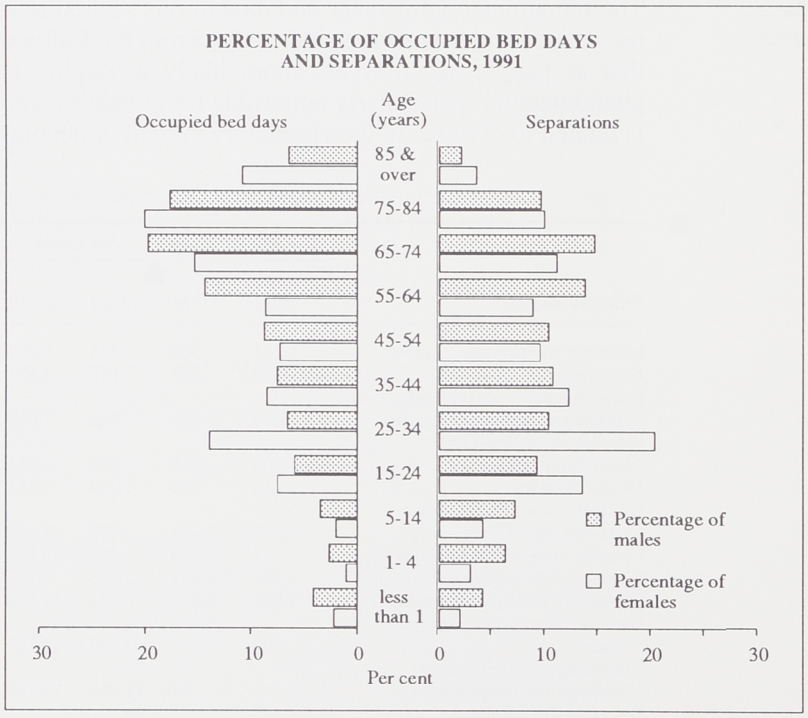
(a) Includes separations for patients whose age is not known. *(b)* Includes haemodialysis treatment. *(c)* Includes separations for patients whose principal diagnosis is not known.

Of the 379,609 inpatient separations included in the previous table, 210,739 (55.5 per cent) involved at least one surgical procedure.

The more frequent procedures included operations on the digestive system (21.2 per cent of total procedures); operations on the musculoskeletal system (14.3 per cent); obstetric procedures (11.6 per cent), and operations on the female genital organs (10.1 per cent).

The average length of stay, as measured by the mean, was 4.3 days. However, the median length of stay, which more closely approximates a typical case, was 2.3 days. The principal procedures which were associated with median stays in hospital of more than 5 days included operations on the cardiovascular system and on the endocrine system, and obstetric procedures.

The following graph shows the percentage of occupied bed days and separations for 1991 for males and females.



Details of principal procedures performed by length of stay of patient in hospital are shown in the following table. It should be noted that haemodialysis has not been included in operations on the cardiovascular system.

Separations, Principal Surgical Procedures by Length of Stay, 1991

Principal procedure	Length of stay: Same day discharge	1 to 2 days	3 to 4 days	5 to 7 days	8 to 14 days	Over 15 days	Total
Surgical procedures:							
Nervous system	2,713	2,389	779	697	851	576	8,005
Endocrine system	6	35	131	229	64	21	486
Eyes	3,512	3,263	1,221	478	241	91	8,806
Ear	4,148	1,672	607	149	58	27	6,661
Nose, mouth, pharynx	5,197	10,515	3,273	536	201	108	19,830
Respiratory system	586	884	384	418	665	461	3,398
Cardiovascular system	836	2,485	1,938	1,102	2,570	1,142	10,073
Haemic and lymphatic systems	271	254	156	155	205	192	1,233
Digestive systems	20,670	6,022	6,074	4,931	4,619	2,330	44,646
Urinary tract	1,778	3,604	1,219	921	923	484	8,929
Male genital organs	3,086	1,622	1,211	1,015	479	178	7,591
Female genital organs	8,475	7,028	882	2,216	2,476	270	21,347
Obstetric procedures	4,695	2,317	4,000	8,981	3,973	480	24,446
Musculoskeletal system	3,652	12,576	4,837	3,335	3,683	2,118	30,201
Breast	435	1,069	624	472	390	77	3,067
Skin and subcutaneous tissue	4,532	3,755	1,252	813	859	809	12,020
Total	*64,592*	*59,490*	*28,588*	*26,448*	*22,257*	*9,364*	*210,739*

Nursing homes

There are four State–funded nursing homes operating in South Australia, with the Julia Farr Centre at Fullarton being the largest of these. It provides accommodation and nursing care for those suffering from chronic disability or disease.

A further 158 nursing homes run by non–government groups provide additional nursing home places throughout the State. These largely cater for aged care, however there are a number which offer care for people with disabilities. The total number of nursing home places in South Australia is 7,130.

Mental health

The South Australian Mental Health Services (SAMHS) was established in August 1991 and has responsibility for the operations of Hillcrest Hospital, Glenside Hospital, Beaufort Clinic, Carramar Clinic and the Community Accommodation Support Service. Glenside and Hillcrest Hospitals continue to provide in–patient and out–patient services. Four private hospitals operate as psychiatric hospitals.

Reorganisation of services from Beaufort Clinic, Carramar Clinic and the Community Accommodation Support Service in order to create integrated community based systems of care has commenced. Regional based systems in the metropolitan area will include access to emergency services, acute in–patient care, continuing care, accommodation and support, respite care, vocational, rehabilitative and recreational assistance and self–help networks. Additional country area services are being planned.

The Child and Adolescent Mental Health Service (CAMHS) continues to operate from administrative bases at The Women and Children's Hospital (Adelaide Children's Hospital Division) and the Flinders Medical Centre.

At any given time about 15,000 adults in South Australia (aged 16–64 years) are affected by serious mental illness. Four hundred (3 per cent) would be in a psychiatric hospital bed and 5,000 (33 per cent) would require extensive community support.

Intellectually disabled

The separation of services for people with an intellectual disability from services for people with a mental illness is well established in South Australia. The Intellectual Disability Services Council, which is incorporated under the South Australian Health Commission Act, is responsible for the planning and monitoring of services for people with an intellectual disability and is responsible for the provision of locally based client services and accommodation support services.

Drug and alcohol services

Services related to drug and alcohol issues are provided by the Drug and Alcohol Services Council (DASC). DASC is a State–wide organisation offering a range of preventative and treatment services. DASC also funds a number of non–government agencies to provide such services.

DASC provides an information service, undertakes community education programs on drug and alcohol issues and has a specialist library that is available to the general public. DASC's Monitoring, Evaluation and Research Unit provides statistical and research–based information on drug and alcohol use in the community, and related issues.

National Health Survey

The 1989–90 National Health Survey provided information on a wide range of health topics, such as illness conditions, health related actions and health risk factors.

A summary of South Australian results from the survey are listed below.

Accidents:

- about one person in seven (202,700) had a condition that was the result of an accident.

Long–term illness conditions:

- about one person in twelve (113,800) suffers from asthma;
- about one in eight (175,800) suffers from arthritis, but it is much higher in the older age groups (about 40 per cent of those aged 65 and over);
- about one in 14 has hypertension (99,800);
- about one in seven suffer from hay fever (192,200);
- about one in eight (174,800) has some form of back trouble.

Health actions:

- about one person in five (297,800) consulted a medical practitioner in the two weeks before the interview and about one in six (223,700) had been hospitalised in the preceding twelve months.

Health risk factors:

- over one–third of the population do not use a sunscreen when they go out in the sun;
- of persons aged 18 years and over, 38 per cent do not exercise, 28 per cent are smokers, and almost two–thirds (63 per cent) had consumed alcohol in the week before the interview.

Women's health:

- about 44 per cent of women aged 18 to 64 years had undergone a Pap smear test in the previous year. Only one in seven had ever had a mammogram.

Community health

Services and centres

There are in excess of 50 community health centres and services located within South Australia. They provide a range of services including counselling, health promotion and education, home nursing and dental services.

Most centres are concerned primarily with improving the health status of a specific local community or a target group through illness prevention and health education, however there are a number which provide general services to the South Australian community.

Domiciliary care

Domiciliary Care Services were originally started in this State with the Woodville Domiciliary Care Service (later Western Regional Domiciliary Care Service) in July 1971. In 1992, 4 metropolitan and 15 country services operated within South Australia. In addition, a number of health care units throughout the State provided home based health care services. These included hospitals (through their outreach services) and community health centres and services.

At 30 June 1992 the Domiciliary Care Services had over 25,000 active clients registered, and in 1991–92, 751,200 client contacts were undertaken. The professional staff and paramedical aides offer the following range of services:

- aged care consultation
- psychiatric consultation
- personal care
- home help
- respite care and sitter services
- artisans for minor home modifications
- provision of equipment and aids
- home dental care through the State Dental Service
- home nursing and terminal care in cooperation with the Royal District Nursing Society.

The Aged Care Assessment Program of the Commonwealth Department of Health, Housing and Community Services funds aged care assessment teams which undertake comprehensive, multi–disciplinary assessment of people requesting nursing home entry. In South Australia, these teams are associated with the Domiciliary Care Services, to ensure that people not approved for entry to a nursing home will receive the Domiciliary Care Services necessary to enable them to continue to live in their own private accommodation.

Child, adolescent and family health

The Child, Adolescent and Family Health Service (CAFHS) is the largest community based child health service in South Australia and plays a major role in the provision of primary health care to families across the State.

CAFHS services are divided into a number of programs:

General Services: These programs provide services directed at every child as well as services available to all children, for example:

- Telephone Advisory Service (24 hours, 7 days per week, includes toll free number for country clients)
- Health Surveillance (primarily offered from centres across the State, including well–baby assessment, anticipatory guidance)
- Parent Education (a series of programs available to parents with children of different ages)
- School Screening (provided at school entry and Year 8 high school).

Special Services: These programs offer a more intensive service targeted at a particular group or community, for example:

- Torrens House (a multi–disciplinary program offered as a weekday in–patient service)
- Outreach (an intensive, short–term support to families and young children in their own home)
- Schools Program (a screening, assessment and group education service provided to school students, parents and teachers in designated disadvantaged schools)
- Hearing Assessment Centre (which offers specialised audiometric and otological assessments for referred clients)
- Medical Assessment (provides medical and developmental assessment to clients referred as a result of Health Surveillance or School Entry Health Checks)
- Hills Childhood Development Program (an early intervention service operating within the local government areas of Mount Barker, Onkaparinga and Stirling)
- Counselling Services (providing face–to–face counselling and telephone counselling).

Friends of CAFHS: This is the voluntary arm of CAFHS and operates through branches made up of groups of parents throughout South Australia who organise activities in their local area as an extension of CAFHS. Special Project Volunteers participate by assisting CAFHS staff and clients in a number of roles.

These client services are supported by information services and computing facilities and the Magarey Institute which is a centre for child and youth health studies and incorporates an extensive library, staff development programs, a policy unit and project and research staff.

Services for women

Four metropolitan women's health centres continue to provide services that integrate clinical services, health education, health promotion and preventative health care for women.

In country South Australia, ten country women's health services have been established under the National Women's Health Program, a Commonwealth–State initiative, to provide comprehensive primary health care services for women.

The South Australian Breast X–Ray Service has been established to provide a mobile mammography screening service across the State, including rural and remote areas, with the aim of reducing breast cancer. The Cervix Screening Service aims to reduce cervix cancer through the implementation of an organised approach with general practitioners, community agencies and pathology services.

Other services and programs for women include the Pregnancy Advisory Centre, Statewide Rape and Sexual Assault Services and Alternative Birthing Services Program.

Aboriginal health

The Aboriginal Health Council (incorporated under the South Australian Health Commission Act) is an advocate for the Aboriginal Community of South Australia in health and health related matters. The Council is also formally responsible for the provision of advice on Aboriginal health matters to the South Australian Minister of Health through the South Australian Health Commission, and the provision of primary health care to those Aboriginal communities not served by independent Aboriginal Health Services (AHS).

AHS currently operate in metropolitan Adelaide, the Port Augusta region, the Anangu Pitjantjatjara Lands, Ceduna–Koonibba, and Yalata Maralinga. The expansion of services to the Port Lincoln, Port Pirie and Riverland communities is also under consideration as part of the National Aboriginal Health Strategy.

Dental health

Government funded dental services for school children, pensioners and disadvantaged persons are the responsibility of the South Australian Dental Service. The School Dental Service offers care to all pre–school, primary, and secondary school children in the State. The service continues until the children turn 18, while they are still at school.

The Adelaide Dental Hospital, which is the only dental teaching hospital in the State, is a major public facility for the treatment of pensioners and other social welfare beneficiaries. General dental care for pensioners and beneficiaries is also available from public dental clinics throughout the metropolitan area and in major country centres.

Other health services

A number of independent organisations provide important health services in South Australia, and many of these organisations receive major support in the form of government grants.

Blood transfusion

The Red Cross Blood Transfusion Service collects and processes blood at the Service's centre in Adelaide, through a mobile unit which visits metropolitan and country centres, and at regional centres. Blood donations collected by the Service are used for emergency and routine needs and stored at major and subsidiary bloodbanks at metropolitan hospitals and regional blood transfusion centres. All donor blood is tested, including screening for syphilis, the HIV–1 and HIV–2 viral antibodies, hepatitis B and hepatitis C antibodies, and antibodies to HTLV–1. The Service administers the South Australian Tissue Typing Service and is also the location of the South Australian Branch of the Australian Bone Marrow Donor Registry and associated laboratory. The Service, which is linked with Flinders Medical Centre and Flinders University in the Centre for Transfusion Medicine and Immunology, was designated in April 1993 as a World Health Organisation Collaborating Centre for Transfusion Medicine.

Home nursing

The Royal District Nursing Society of SA Inc. (RDNS) is an independent, non–profit organisation providing comprehensive nursing care to individuals in the community setting.

Nursing care is offered according to assessed need, over a 24–hour period, to young and aged people, the frail and disabled, the acute and chronically ill, to those requiring care following day surgery and to the terminally ill.

Nursing staff are employed as specialist consultants in the areas of diabetes management, continence promotion, palliative care, AIDS/HIV care and developmental disabilities.

Multi–disciplinary courses are offered in palliative care, continence promotion and dementia care. Nursing specialist courses are available by distance education.

In 1992–93 the full–time equivalent of 296 registered nurses made 446,091 visits to a monthly average of 5,175 clients. To achieve this 2.3 million kilometres were travelled in 202 cars.

The RDNS operates from administrative headquarters in Adelaide with regional and district centres located in the metropolitan and some country areas. The main source of funding comes through the Home and Community Care Program, the South Australian Health Commission and Medicare. Donations from clients and the community, RDNS branches, service clubs and local government provide additional funds to support the Society's work.

Flying Doctor Service

The Royal Flying Doctor Service (Central Section) is responsible for the aviation management of all aero–medical retrieval and air ambulance aircraft in South Australia. It also provides an aerial medical service on a routine and emergency basis to remote areas of South Australia and the southern half of Northern Territory, covering an area of some 2.2 million square kilometres. It has control bases at Port Augusta and Alice Springs. The Royal Flying Doctor Service undertook 2,322 retrieval and hospital to hospital transfers out of Adelaide Airport during 1992–93.

The Royal Flying Doctor Service provides an important communication link to people living, working and touring in outback Australia.

SA St John Ambulance Service

SA St John Ambulance Service Inc. provides the ambulance service for the State operating from bases throughout the metropolitan and country areas, as well as operating air ambulances jointly with the Royal Flying Doctor Service.

The Service is established as a joint venture between the Minister of Health and the national office of St. John.

St John foundations provide voluntary first aid services at numerous functions throughout the State, and perform important first aid training to the general public and industry.

Other health services

Important services are also provided by other independent health–related organisations such as the National Heart Foundation, the Anti–Cancer Foundation and the Family Planning Association.

Public health

The Public and Environmental Health Service of the South Australian Health Commission is concerned with the prevention and control of disease, illness and injury, and the promotion of health of South Australians. The Service is comprised of a number of specialist operational units which monitor health status, plan and deliver programs to reduce illness and injury, and monitor and control environmental and other factors affecting health.

The Service hosts and has an executive responsibility for the Central Board of Health, the Public and Environmental Health Council, the Food Quality Committee, the Controlled Substances Advisory Council, the Radiation Protection Committee and interdepartmental committees dealing with the health aspects of water quality and electromagnetic radiation.

The core functions of the Service as the State's public health authority are assessment, policy development and assurance.

The Service also oversees the Port Pirie Lead Program, which is a major, innovative public health program involving blood and environmental monitoring, community education, house decontamination and greening activities.

Environmental Health

This branch is concerned with such aspects of public health as the quality of water and food supply, shelter, disease vectors, hazardous substances and waste disposal. It also administers legislation and provides education and advice on drugs of addiction; medicinal, domestic, industrial and agricultural poisons; pest control activities; and therapeutic substances and devices.

Radiation Protection

This branch provides a consultancy and advisory service, carries out education and training and conducts research and promotion in radiation protection matters. It administers the Radiation Protection and Control Act.

Breast X–ray

This service coordinates mammographic screenings and assessment for the early detection and treatment of breast cancer in women aged over 40 years.

Cervical cancer screening

This new service is being developed as part of a program to reduce morbidity from cervical cancer.

Epidemiology

In broad terms the Epidemiology Branch is responsible for monitoring the health status of the South Australian population and for control measures to improve health, giving priority to:

- immunisation;
- responding to outbreaks or clusters of infectious diseases, cancers, birth defects, fetal deaths and other outcomes of pregnancy;
- injury prevention;
- cancer prevention, screening for early detection and providing support services to improve treatment and palliative care;
- advancing the antenatal, neonatal, and postnatal health of babies, especially with respect to Aboriginal people, home births and other births potentially at risk.

Infectious and Notifiable Diseases : Cases Notified[(a)]

Diseases	*1990*	*1991*	*1992*
Acquired Immune Deficiency Syndrome (AIDS) *(b)*	25	38	31
Arbovirus infection	23	72	116
Atypical mycobacterium infections	51	51	49
Brucellosis	–	–	–
Campylobacter infection	1,296	1,598	2,190
Chlamydia trachomatis	1,361	1,070	937
Congenital rubella	2	–	–
Gonorrhoea	173	199	165
Hepatitis A	99	117	104
Hepatitis B	36	28	22
Hepatitis C	*(c)*	*(c)*	2
Hepatitis unspecified	5	4	4
Human Immunodeficiency Virus	63	46	34
Hydatid disease	2	–	1
Legionnellosis	19	21	23
Leprosy	1	–	–
Leptospirosis	6	5	9
Malaria	33	42	35
Measles	43	155	163
Meningitis (Hib)	24	36	35
Meningitis (Meningococcal)	12	12	8
Meningococcal infection (other)	8	10	13
Ornithosis	15	34	18
Pertussis (whooping cough)	172	44	75
Q–fever	21	30	12
Rubella	354	92	121
Salmonella infections	636	494	352
Shigella infections	94	90	88
Syphilis	83	69	98
Tetanus	2	1	2
Tuberculosis	89	62	62
Typhoid	3	3	5
Vibrio Parahaemolyticus infection	1	–	2
Yersinia infections	200	183	172

(a) Cases notified may not reflect the actual number of occurrences of the disease in the population.
(b) Data for AIDS pertain to clinical disease in Category A. Data for AIDS – Related Complex and Lymphadenopathy Syndrome are not included.
(c) Not available.

Termination of pregnancy

In South Australia, legal termination of pregnancy for specified medical and related conditions requires certification of the grounds for termination usually from two legally qualified medical practitioners, one of whom performs the operation. All such operations are required to be performed in hospitals prescribed for this purpose. Terminations are notified to the Health Commission, and the following table shows the number of terminations by age group for the years 1990 to 1992.

Terminations of Pregnancy Notified : Age Distribution

Age group (years)	*1990*	*1991*	*1992*
Under 15	19	22	23
15–19	972	968	760
20–24	1,326	1,422	1,198
25–29	988	968	858
30–34	681	791	676
35–39	352	446	377
40–44	121	126	125
45 and over	9	11	12
Total	*4,468*	*4,754*	*4,029*

Health Promotion Projects Unit

The Unit undertakes research, development and coordination to address priority areas of preventable ill–health. The current priority areas are tobacco control, heart health, safe sex and mental health.

Sexually Transmitted Disease

This service has, in addition to clinical service and epidemiological surveillance and analytical roles, responsibility for prevention and education with regard to sexually transmitted diseases including HIV (AIDS).

Disabled and handicapped persons

An ABS Survey conducted in 1988 collected information about disabled and handicapped persons in Australia. The survey defined a disabled person as one who had a disability or impairment which had lasted or was likely to last for six months or more.

Some examples of disabilities and impairments included in the survey are: loss of sight (even when wearing glasses or contact lenses); loss of hearing; blackouts and fits; slowness at learning or understanding; incomplete use of arms or legs; and restrictions in engaging in physical activities.

A handicapped person was defined as a disabled person who was limited in his/her ability to perform certain tasks. These were tasks associated with:

- self–care (showering, bathing, eating, dressing);
- mobility (difficulties in using public transport, moving about at home, walking 200 metres, climbing stairs);
- verbal communication (difficulties in understanding a person or being understood);
- schooling (attending a special school, having difficulties at school because of a disabling condition etc.); and
- employment (permanently unable to work, restricted in the type of work, often needed time off work etc.).

Disabled and Handicapped Persons: Summary Characteristics South Australia, 1988

Particulars	In households	In health establishments	Total: Number	Total: Per cent (a)
HANDICAPPED				
Sex:				
Males	85,600	5,500	91,200	13.1
Females	85,800	11,700	97,500	13.9
Age (years):				
0–4	4,600	*	4,600	4.6
5–14	9,500	200	9,700	5.0
15–44	44,600	1,700	46,400	7.1
45–64	54,900	1,300	56,200	20.4
65 and over	57,800	13,900	71,800	42.0
Total handicapped persons	*171,500*	*17,200*	*188,700*	*13.5*
Area of handicap *(b)*:				
Self–care	66,300	14,900	81,300	6.3
Mobility	130,900	17,000	147,900	11.4
Communication	23,900	9,700	33,600	2.6
Schooling	10,200	600	10,800	0.8
Employment	85,700	..	85,700	6.6
TOTAL DISABLED				
Sex:				
Males	98,700	6,000	104,700	15.1
Females	98,300	12,000	110,300	15.7
Age (years):				
0–4	4,600	*	4,600	4.6
5–14	10,700	200	10,900	5.6
15–44	54,200	1,900	56,200	8.6
45–64	60,700	1,700	62,300	22.7
65 and over	67,000	14,200	81,000	47.4
Total disabled persons	*197,100*	*18,000*	*215,000*	*15.4*
Type of primary disabling condition *(c)*:				
Mental disorders	20,700	6,400	27,000	1.9
Sight loss	9,400	800	10,200	0.7
Hearing loss	23,300	400	23,700	1.7
Nervous system diseases	12,000	2,400	14,400	1.0
Circulatory diseases	22,600	2,000	24,500	1.8
Respiratory diseases	15,500	700	16,300	1.2
Diseases of the musculoskeletal system and connective tissue	61,600	3,000	64,600	4.6
All other diseases and conditions	33,500	2,700	36,200	2.6

(a) Per cent of total population in same group. *(b)* Only collected for handicapped persons aged five years or more. *(c)* For persons with multiple conditions, this is the condition causing the most problems. However, persons with both a mental disorder and a physical condition are counted twice.

The survey showed that there were 215,000 disabled persons in South Australia, of whom 188,700 (87.8 per cent) were also handicapped. Less than 10 per cent of these persons lived in health establishments. The most common disabilities were mental disorders, hearing loss, circulatory diseases (about half being heart disease), and diseases of the musculoskeletal system and connective tissue (over 80 per cent being arthritis and disorders of the back). Of those aged five years or more who were handicapped about four–fifths had a mobility problem. Over two–fifths had a self–care handicap while a similar proportion were limited in the type of employment they could undertake.

Mortality

Causes of death

Causes of death in South Australia are classified according to the *International Classification of Diseases, Ninth Revision* (ICD9).

Figures for deaths in this section are based on the State or Territory of usual residence of the deceased and relate to the date of registration of death, not the date of occurrence. Australian residents who die overseas are excluded from the figures, but deaths of persons usually resident overseas are included in the figures of the State or Territory where the death occurred.

In 1992, the three leading causes of death were ischaemic heart disease, malignant neoplasms (cancer) and cerebrovascular disease (stroke). The proportions of deaths from the various causes are related to the age composition of the population, and there are marked differences in main causes of death by age and sex.

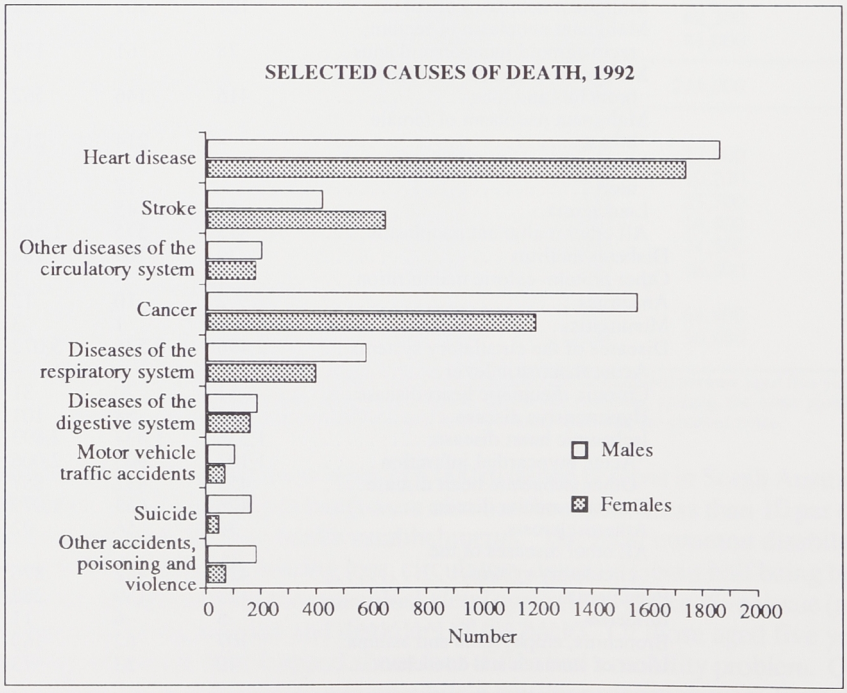
Causes of Death[(a)], 1992

Cause of death	Number of deaths			Rate (b)	Proportion of total deaths
	Males	Females	Persons		
				persons	per cent
Infectious and parasitic diseases:	34	32	66	4.5	0.6
Intestinal infectious diseases	–	1	1	0.1	–
Tuberculosis	3	4	7	0.5	0.1
Meningococcal infection	–	1	1	0.1	–
Septicaemia	18	14	32	2.2	0.3
All other infectious and parasitic diseases	13	12	25	1.7	0.2
Malignant neoplasms:	1,564	1,198	2,762	190.2	25.3
Malignant neoplasm of stomach	75	39	114	7.9	1.0
Malignant neoplasm of colon	121	101	222	15.3	2.0
Malignant neoplasm of rectum, rectosigmoid junction and anus	78	61	139	9.6	1.3
Malignant neoplasm of trachea, bronchus and lung	416	146	562	38.7	5.1
Malignant neoplasm of female breast	–	214	214	14.7	2.0
Malignant neoplasm of cervix uteri	–	17	17	1.2	0.2
Leukaemia	61	45	106	7.3	1.0
All other malignant neoplasms	813	575	1,388	95.6	12.7
Diabetes mellitus	79	109	188	12.9	1.7
Other protein–calorie malnutrition	1	–	1	0.1	–
Anaemias	2	10	12	0.8	0.1
Meningitis	2	1	3	0.2	–
Diseases of the circulatory system:	2,496	2,576	5,072	349.3	46.4
Acute rheumatic fever	–	–	–	–	–
Chronic rheumatic heart disease	11	20	31	2.1	0.3
Hypertensive disease	43	58	101	7.0	0.9
Ischaemic heart disease;	1,556	1,337	2,893	199.2	26.5
Acute myocardial infarction	1,101	905	2,006	138.2	18.4
Other ischaemic heart disease	455	432	887	61.1	8.1
Cerebrovascular disease	426	653	1,079	74.3	9.9
Atherosclerosis	36	56	92	6.3	0.8
All other diseases of the circulatory system	424	452	876	60.3	8.0
Pneumonia	123	159	282	19.4	2.6
Influenza	5	6	11	0.8	0.1
Bronchitis, emphysema and asthma	107	62	169	11.6	1.5
Ulcer of stomach and duodenum	40	33	73	5.0	0.7

Causes of Death[(a)], 1990 *(continued)*

Cause of death	Number of deaths			Rate (b)	Proportion of total deaths
	Males	Females	Persons	persons	per cent
Appendicitis	3	1	4	0.3	–
Chronic liver disease and cirrhosis	71	27	98	6.7	0.9
Nephritis, nephrotic syndrome and nephrosis	38	44	82	5.6	0.8
Hyperplasia of prostate	4	–	4	0.3	–
Direct obstetric deaths	–	–	–	–	–
Congenital anomalies	23	22	45	3.1	0.4
Certain conditions originating in the perinatal period:	35	18	53	3.7	0.5
Hypoxia, birth asphyxia and other respiratory conditions	6	6	12	0.8	0.1
Other conditions originating in the perinatal period	29	12	41	2.8	0.4
Signs, symptoms and ill-defined conditions	27	33	60	4.1	0.5
All other conditions	704	594	1,298	89.4	11.9
Accidents and adverse affects:	272	131	403	27.8	3.7
Motor vehicle traffic accidents	105	68	173	11.9	1.6
Accidental falls	35	27	62	4.3	0.6
All other accidents	132	36	168	11.6	1.5
Suicide	165	48	213	14.7	1.9
Homicide	11	9	20	1.4	0.2
All other external causes	6	–	6	0.4	0.1
All causes	*5,812*	*5,113*	*10,925*	*752.4*	*100.0*

(a) The classification uses the *Mortality List of Fifty Causes* recommended by ICD 9.
(b) The number of deaths by specified cause per 100,000 of mean resident population.



Perinatal deaths

Perinatal deaths comprise *fetal deaths* (any child born weighing at least 500 grams at delivery or, when birthweight is unavailable, of at least 22 weeks gestation, which did not at any time after being born, breathe or show any other sign of life) and *neonatal deaths* (any child weighing at least 500 grams at delivery or, when birthweight is unavailable, of at least 22 weeks gestation, who was born alive and died within 28 days of birth).

Causes of Perinatal Deaths : Condition in Child by Condition in Mother, 1992

	Condition in mother				
Condition in child	*Maternal conditions which may be unrelated to present pregnancy*	*Maternal compli-cations of pregnancy*	*Compli-cations of placenta, cord and membranes*	*No condition reported*	*Total (incl. other)*
Slow fetal growth, fetal malnutrition and immaturity	2	5	2	4	13
Birth trauma	–	–	–	–	–
Intrauterine hypoxia and birth asphyxia	1	3	8	16	28
Respiratory distress syndrome	–	–	–	1	1
Other respiratory conditions of fetus and newborn	–	–	–	3	3
Fetal and neonatal haemorrhage	–	1	4	1	6
Other conditions originating in the perinatal period	8	4	21	43	76
Congenital anomalies	–	–	–	29	29
All other causes	–	–	–	1	1
Total perinatal deaths	*11*	*13*	*35*	*98*	*157*

Further information on death statistics is included in Part 4.5 Births and Deaths.

Life expectancy

Life expectancy is the expected years of life remaining to a person of specified age if present patterns of mortality do not change during that lifetime. Life expectancy tables provide a useful indicator of long–term changes in health status.

Expectation of Life[(a)]

	At age (years)								
Period	*0*	*10*	*20*	*30*	*40*	*50*	*60*	*70*	*80*
				MALES					
1987	73.50	64.46	54.90	45.54	35.99	26.77	18.55	11.66	6.64
1988	73.62	64.53	54.98	45.66	36.18	27.00	18.59	11.88	6.96
1989	73.76	64.53	54.91	45.57	36.13	26.87	18.49	11.45	6.60
1990	74.08	64.92	55.29	46.13	36.73	27.47	19.05	12.23	7.04
1991	74.69	65.25	55.56	46.26	36.86	27.64	19.10	12.03	6.75
1992	75.05	65.70	55.96	46.61	37.11	27.89	19.40	12.34	7.02
				FEMALES					
1987	80.13	70.89	61.05	51.28	41.61	32.21	23.25	15.28	8.80
1988	80.35	71.00	61.17	51.41	41.66	32.18	23.22	15.25	8.60
1989	79.80	70.60	60.77	51.06	41.39	31.96	23.08	15.15	8.67
1990	80.30	71.04	61.23	51.48	41.80	32.28	23.30	15.29	8.78
1991	80.49	71.00	61.20	51.51	41.85	32.38	23.42	15.35	8.70
1992	80.92	71.51	61.68	51.95	42.25	32.79	23.88	15.70	8.93

(a) Based on Annual Life Tables calculated by the Australian Statistician. Because of the method of calculation, these figures are subject to annual fluctuations which may not be indicative of a longer term trend.

Occupational health and safety

Legislation

The provisions of the *Occupational Health, Safety and Welfare Act 1986*, which replaced the *Industrial Safety, Health and Welfare Act 1972*, took effect on 30 November 1987 and apply to all workers in South Australia, with the exception of Commonwealth Government employees who are provided for under the separate Commonwealth legislation. The Act sets out the rights and responsibilities of employers and employees, and is designed to encourage their involvement in achieving and maintaining a safe and healthy workplace. The South Australian Occupational Health and Safety Commission was established as a statutory, tripartite body under the Act.

The Commission provides a forum for representatives of employers, unions and Government organisations to develop occupational health and safety standards, formulate policies and strategies, promote awareness of occupational health and safety and to report and make recommendations to the Minister about the administration of the Act and other legislation relating to occupational health, safety and welfare.

The legislation emphasises the elimination of hazards at their source; establishes clearly the duties of employers, self–employed and employees, manufacturers and designers; provides for workers, elected health and safety representatives with statutory powers and functions and for joint health and safety committees; extends the powers of inspectors and establishes procedures for the resolution of health and safety issues in the workplace. Other legislation governing health and safety includes the *Boilers and Pressure Vessels Act 1968*, the *Dangerous Substances Act 1979*, the *Mines and Works Inspection Act 1920*, the *Explosives Act 1936*, the *Radiation Protection and Control Act 1982* and the *Controlled Substances Act 1984*.

Work related injury and disease

The *Workers Compensation Act 1971* was repealed and replaced by the *Workers Rehabilitation and Compensation Act 1986* which established a new authority – the Workers Rehabilitation and Compensation Corporation, 'WorkCover'. The Act, which came into operation on 30 September 1987, covers all persons employed under a contract of service, or who work for other persons under a contract arrangement or understanding in prescribed work of a prescribed class. The Crown is the presumptive employer of persons who voluntarily perform work of a prescribed class that is of benefit to the State.

The Act does not cover Commonwealth Government employees, who are provided for under separate Commonwealth legislation, or persons sustaining injuries from certain sporting or athletic events.

The Act places strong emphasis on rehabilitation as well as providing entitlement to weekly income payments. These payments are calculated on the basis of the worker's average weekly earnings as defined in the Act, and are 100 per cent of this amount in the first year, reducing to 80 per cent in the following years. The employer pays an injured worker for the first week's absence in each calendar year unless the injury was incurred under specified circumstances or the employer was insured against this liability. Death benefits are payable in the event of fatal accidents or diseases.

Compensation is funded by a levy on all non–exempt employers based on percentages of the aggregate remuneration paid to the employer's workers. Levels set by the Act had ranged to a maximum of 4.5 per cent but this was increased from 1 July 1990 to a maximum of 7.5 per cent. The percentage levied depends on the predominant class of industry in which the employer is engaged, but this percentage may be adjusted, depending on the employer's record with regard to health and safety, under a bonus/penalty scheme, also introduced from 1 July 1990. Exempt employers are self–funded.

Some statistics on employment injuries and diseases are included in the WorkCover Annual Report. For data for years prior to WorkCover, refer to previous issues of this publication.

5.4 SOCIAL WELFARE

The Commonwealth, State and local governments and a large number of voluntary agencies provide social welfare services for South Australians.

The Commonwealth Government is concerned largely with providing income maintenance in the form of pensions, benefits and allowances, and repatriation services. It also provides, either directly or through State and local government authorities and voluntary agencies, for a wide range of welfare services for people with special needs.

The Department for Family and Community Services is the main State agency and operates in the field of child and family welfare and distributes emergency financial assistance in certain circumstances.

Local government and voluntary agencies, many of which receive government funding, also provide a range of welfare–related services.

Commonwealth Social Security

The Department of Social Security is responsible under the *Social Security Act 1991* (Cwlth) for social security entitlements and related services.

Pensions

The Department of Social Security pays the following pensions subject to income and assets tests and certain residential requirements:

- age pension;
- disability support pension;
- wife's pension;
- carer's pension;
- widow's pension;
- sole parent's pension and rehabilitation allowances (under conditions similar to those applying to pensions).

Eligible recipients of these payments may receive additional amounts for each dependent child, or for rent assistance or an allowance for remote areas. Pension rates are subject to twice–yearly indexation in accordance with increases in the Consumer Price Index.

Pension Recipients[a]

Type of pension	At 30 June 1990	1991	1992
Age pension	138,705	141,864	147,964
Invalid pension (b)	32,861	34,224	..
Disability support pension (b)	..	..	37,383
Wife's/carer's pension	113,482	13,920	13,757
Widow's pension	6,739	6,308	5,821
Sole parent's pension	23,524	24,509	25,815
Sheltered employment allowance (b)	1,020	1,223	..
Rehabilitation allowance	146	396	173

(a) Includes figures for Broken Hill Region (NSW).
(b) The disability support pension was introduced on 12 November 1991. All recipients of the invalid pension and sheltered employment allowance now receive the disability support pension.

Benefits

The Department of Social Security pays the following benefits to eligible persons subject to an income test:

- newstart allowance paid to unemployed people;
- job search allowance paid to unemployed people;
- sickness allowance;
- special benefit (payable in circumstances of special need to persons not eligible for other pensions or benefits).

Average Number of Benefit Recipients[a]

Type of benefit	1989–90	1990–91	1991–92
Unemployment benefit (b)	41,210	50,197	..
Job search and newstart allowances (c)	..	..	69,034
Sickness allowance	6,213	5,290	4,729
Special benefit	1,592	1,780	2,039

(a) Includes figures for Broken Hill Region (NSW). (b) Includes job search allowance. (c) Before 1 July 1991 people on these benefits received either a job search allowance or unemployment benefit.

As for pensions, eligible recipients may receive additional payments for children, rent assistance and remote area allowance, and benefit rates are indexed to the Consumer Price Index.

Family payments

The Department of Social Security pays the following allowances to assist families, subject to eligibility requirements:

- family allowance (payable per dependent child, with additional payments for families with children from multiple births);
- child disability allowance;
- double orphan's pension;
- family allowance supplement (for certain low income families).

Allowances Paid[(a)]

Type of allowance	At 30 June 1989	1990	1991
Number of children and students for whom Family Allowance paid	313,068	306,472	308,836
Number of children for whom Child Disability Allowance paid	4,061	4,081	4,504
Number of orphans for whom Double Orphan's Pension paid	193	151	167
Family Allowance Supplement recipients	16,210	17,084	16,376

(a) Includes Broken Hill Region (NSW).

Repatriation benefits

The Commonwealth Department of Veterans' Affairs is responsible under the provisions of the *Veterans' Entitlement Act 1986* (Cwlth) for providing assistance, including medical care, income support and compensation, to veterans and their dependants. Details on health services provided to veterans are included in Part 5.3 Health.

Income support in the form of Service Pensions and compensation in the form of Disability Pensions are provided to eligible veterans and their dependants. Certain other benefits may also be available, with some being subject to income and assets testing. The major veterans' pensions are paid at similar rates to Social Security pensions and benefits and are similarly linked to increases in the Consumer Price Index.

Repatriation Pensions by Type
(Number)

Type of pension	At 30 June 1990	1991	1992
Disability Pension payable to:			
Incapacitated veterans	14,053	12,143	13,632
Dependants of incapacitated veterans	10,822	9,428	9,772
Dependants of deceased veterans	6,688	6,873	6,999
Total Disability Pensions payable	*31,563*	*28,444*	*30,403*
Service Pension payable to:			
Veterans	22,760	22,175	21,826
Wives and widows of veterans	16,835	16,397	16,127
Total Service Pensions payable	*39,595*	*38,572*	*37,953*

Community welfare

The South Australian Department for Family and Community Services is responsible for promoting the welfare of individuals, families, groups and the community, with priority being given to those most disadvantaged in the community. It encourages the community to develop its own welfare services by promoting the coordination and collaboration of government and non–government welfare services, and through direct service delivery.

Welfare services provided by the Department include:

- funding to other welfare organisations;
- individual and family support through general counselling, custody and access counselling, advice and counselling on family maintenance, budgeting advice and crisis care services;
- emergency financial assistance;
- administering concession schemes for electricity, burial assistance, council, water and sewerage rates and public transport;
- child protection;
- substitute family care for children including foster care, residential care and adoptions;
- assisting young offenders through the Children's Courts, secure and non–secure residential care and supervision in the community;
- State disaster relief.

The following table provides a summary of selected major activities by the Department.

Department for Family and Community Services, Selected Services

Type of service	*1989–90*	*1990–91*	*1991–92*
Financial Counselling Service, new clients counselled	3,314	4,329	4,474
Family maintenance advice and counselling cases	4,579	3,238	2,744
Crisis Care Service, home visit assistance	2,288	2,387	2,000
Emergency Financial Assistance, successful applicants	40,206	33,763	37,124
Child protection incidents	2,898	3,462	4,542
Children's Aid Panel appearances, number of offenders	4,345	4,920	3,636
Children's Court appearances, number of offenders	2,084	2,167	2,018
Number of children placed on bonds with supervision	494	522	503
Psychological services, number of client referrals	745	731	1,117

Adoptions

There are two major categories of adoptions for which adoption orders are granted. Placement adoptions (Australian, Inter–country or Special Needs) are those where an Australian child, or one from another country, is adopted by new adoptive parents. Special Needs adoptions find permanent placement for children with physical, intellectual and emotional disabilities. Particular child adoptions (Australian) are those by a near relative, by foster parents who have cared for the child for some time, or by a natural parent and his or her spouse who is not the other natural parent.

Adoption Orders Granted

Type of adoption order granted	*1989–90*	*1990–91*	*1991–92*
Placement adoption:			
Australian	30	26	20
Inter–country	44	44	55
Special needs	9	5	–
Particular child adoption:			
Australian	64	33	41
Total	*147*	*108*	*116*

Other welfare services

The South Australian Housing Trust and Emergency Housing Office provide a number of housing–related services directed towards pensioners, beneficiaries, low income recipients and other disadvantaged groups. Details of services provided are in Part 9.2 Building.

A considerable number of non–government agencies and community groups provide welfare related services in South Australia, and many receive funding through Family and Community Development Grants. These grants are administered by the Family and Community Development Unit of the Department for Family and Community Services.

Details of organisations concerned with social welfare are contained in the *Directory of Social Welfare Resources* published jointly by the South Australian Council of Social Services and the Citizens Advice Bureau. The Citizens Advice Bureau advises those in need on how best to use the wide range of services provided by government and non–government bodies.

5.5 SOCIAL SERVICES

A considerable number of social services, many of which are directed towards individuals and groups with special needs, are provided through government agencies, traditional service organisations and community and self–help groups. The Commonwealth Department of Health, Housing, Local Government and Community Services has a major role in the drawing together, support and coordination of many of these services.

Commonwealth community services

The Department of Health, Housing, Local Government and Community Services is responsible for programs to assist children's services, people with disabilities, aged persons, homeless people and others in special need and has the following major administrative functions with regard to community services (excluding its Health functions):

- programs for frail, aged people in nursing homes and hostels and in their own homes through aged care assessment teams, Home and Community Care, capital and recurrent funding of nursing homes and hostels, payment of Domiciliary Nursing Care Benefit and ensuring adequate standards of care in residential facilities are met;
- child care services;
- disability services;
- Supported Accommodation Assistance and other community services;
- rehabilitation services;
- the provision of grants–in–aid towards the operating costs of national organisations representing the welfare interests of people who are clients of the Department.

Aboriginal affairs

The Aboriginal and Torres Strait Islander Commission advises the Government on all matters concerning Aboriginal people, formulates policy and develops and implements and/or coordinates programs directed towards the advancement of the Aboriginal people. Consultation with Aboriginal people is mandatory in carrying out these functions.

The Economic Division is responsible for the development of national policies and strategies for Aboriginal people in the areas of employment; development; education and training; commercial enterprises; housing loans; and regional support. The Social Division has responsibility for land, heritage and environment; health; social justice; and infrastructure.

Social justice strategy

In 1987 the South Australian Government announced its Social Justice Strategy. The strategy is based on the principles that all members of society have rights and obligations and should enjoy equal opportunities to realise their needs and aspirations; all members of society should have opportunities to participate in decision–making which affects their lives; and priority of care should be given to those with greatest need.

The strategy requires all government agencies to incorporate these principles in their planning, decision making and resource allocation. Government agencies are required to deliver services fairly and equitably according to the needs of the whole community and to take into account the social impact of their policies and programs. All State services including transport, water, sanitation, energy supply, health, employment, education and training are involved in this approach.

The administrative base for the strategy lies with the Social Justice Unit in the Cabinet Office of the Department of the Premier and Cabinet. The Unit is responsible for providing direction and focus, and assisting agencies in implementing the strategy.

Office of the Commissioner for the Ageing

The Office of the Commissioner for the Ageing operates under the *Commissioner for the Ageing Act 1984*. The objectives of the Act are orientated to the enhancement of the quality of life of elderly people and the reciprocal enrichment of the community in which elderly people live.

The functions of the Commissioner include: advising the South Australian Government on the implementation of programs and services for or affecting the ageing (including special needs groups within the population of the ageing) in consultation with the aged; monitoring the effects on the ageing of legislation and practices at all levels of government; and, to compile, analyse and disseminate information concerning the ageing.

South Australia has had a Commissioner for the Ageing since 1985.

Chapter 6

EDUCATION AND SCIENCE

6.1 EDUCATION

Education is available to all South Australians in a variety of forms, most being provided or supported by government agencies. Constitutionally, education is a State responsibility, but the Commonwealth makes funds available through Consolidated Revenue and Special Purpose Grants.

Once students leave the school system they may be further educated and trained at other educational institutions or in the workplace. They may also take advantage of community service courses, or other public and private resources. Provision also exists for adults to re–enter the education system.

The present system of government schools and compulsory education dates from the *Education Act 1875*. Education in South Australia is now governed by the *Education Act 1972*. A historical summary of education in South Australia was included on pages 153–4 of the *South Australian Year Book 1969*.

State Government education policies seek to identify and address the needs of students who are disadvantaged in the present education system. The students so identified are girls, students from non–English speaking backgrounds, Aboriginals, students who have disabilities, students living in poverty, and students living in rural and isolated settings. The Education Department's Social Justice Action Plan focuses on the access and attendance, participation, retention and attainment levels of the above targeted groups, in order to improve the outcomes of their education in government schools.

Early childhood services

Established on 1 July 1985, the Children's Services Office (CSO) is an organisation which coordinates a range of early childhood services. This involves the provision of pre–school education, child care, family day care, outside school hours care, vacation care, play centres and toy libraries, and liaison with and assistance to other bodies which also provide these services. CSO also has the responsibility for licensing of child care centres in South Australia.

In June 1992, 322 CSO pre–school centres provided 15,590 eligible children with sessional pre–school programs and 3,437 children participated in other early childhood programs. These centres were staffed by the equivalent of 685 full–time staff including teachers and pre–school assistants.

The CSO provides support to children with special needs and employs special education teachers, psychologists, speech pathologists and social workers.

The Education Department also is involved in the provision of pre–school education. In August 1992 there were 100 child/parent centres integrated into junior primary, primary, area or Aboriginal schools. Child/parent centres were staffed by the equivalent of 104 teachers and 67 ancillary staff, with 2.4 central support staff and provided programs for 3,372 eligible children.

Centre–based Pre–school Education and Subsidised Child Care Services, 1992

	Children using pre–school services			
Age last birthday (years)	*Pre–school centres*	*Child/parent centres*	*Total*	*Children using subsidised child care centres*
Under 3	81	n.a.	n.a.	4,107
3	2,450	n.a.	n.a.	2,543
4	15,536	3,135	18,671	1,837
5	960	72	1,032	168
6	–	–	–	49
Over 6	–	–	–	76
Total	*19,027*	*n.a.*	*n.a.*	*8,780*

There were sixty–two non–funded centres which provided child care during 1992. Most of these centres were commercial enterprises although some were non–profit establishments. In addition there were 10,111 children registered with Family Day Care.

Primary and secondary education

Education at the primary and secondary level is available at government schools which are administered and managed by the Education Department within the Department of Education, Employment and Training (South Australia) (DEET (SA)), and at non–government schools which are, for the most part, identified with various religious denominations, and which must be registered with the Non–Government Schools Registration Board. Attendance at school is compulsory for children from six years of age until they have turned fifteen. No child may be enrolled for the first time at a government school, other than a child/parent centre, before the age of five years. The admission policy allows for children to begin school soon after they turn five. Government schools are required to have a minimum of four intakes each year but are encouraged to have more.

The word 'Year' is used to denote class level in both primary and secondary schools. Primary classes are designated Reception then Year 1 through to Year 7, while Years 8 to 12 represent the levels of secondary education.

In July 1992 there were 248,802 students attending 866 schools in South Australia. The Education Department was responsible for the operation of 682 of these, comprising 69 junior primary schools, 408 primary schools, 2 primary–secondary schools, 89 secondary schools, 53 area schools, 22 special schools, 21 rural schools, 15 Aboriginal schools, 2 intensive English–as–a–second–language schools and the Open Access College at Marden. About 100 of these schools have pre–schools, called child/parent centres, on site. There were also 10 schools designated as specialist schools for adults re–entering the education system.

The 184 non–government schools included 104 Catholic schools, 72 of which were primary; 27 Lutheran schools, 23 of which were primary; and 12 Anglican schools, 7 of which were mixed primary–secondary.

Compared to 1988, there were 33 fewer government and 6 more non–government schools operating in 1992, however, the number of full–time students enrolled in all schools rose 0.8 per cent over the previous year to 248,802. This continues a trend evident from 1988, when student numbers began to rise again after they had fallen by 7.6 per cent since 1980.

Full–time Students by Level of Study and Category of School
at or about 1 July

Students	*1990*	*1991*	*1992*
Primary:			
Government	119,490	122,139	124,254
Non–government	32,179	33,925	35,123
Total	*151,669*	*156,064*	*159,377*
Secondary:			
Government	65,378	64,675	63,302
Non–government	25,688	26,094	26,123
Total	*91,066*	*90,769*	*89,425*
Total students	**242,735**	**246,833**	**248,802**

The number of full–time students attending government schools decreased steadily between 1975 and 1988, but since 1989 a gradual increase has occurred. Enrolments at non–government schools have shown a marked increase annually since 1978.

Full–time Students : Age Of Students and Category of School, 1992

Age at 1 July (years)	*Government schools*	*Non–government schools*	*All schools*
Under 6	16,357	4,630	20,987
6	16,064	4,372	20,436
7	16,074	4,337	20,411
8	16,418	4,476	20,894
9	15,908	4,335	20,243
10	15,549	4,385	19,934
11	15,216	4,494	19,710
12	14,437	4,878	19,315
13	13,541	5,667	19,208
14	13,668	5,476	19,144
15	12,825	5,491	18,316
16	11,246	5,142	16,388
17	6,403	2,792	9,195
18	1,850	552	2,402
19	573	105	678
20 and over *(a)*	1,427	114	1,541
All students	*187,556*	*61,246*	*248,802*

(a) Includes students of unknown age at time of census.

The number of students at each age–grade level generally reflects the birth rates of previous years. However, an apparent increase in Reception students after 1986 is the result of the gradual implementation of the 'First Years of School Policy', which resulted in additional students being retained in the lower Year levels. This policy commenced at the beginning of 1985 and required all students to spend 10 to 13 terms (under the 4 term year) before entry to Year 3. Previously, students could move from Reception to Year 1 in the same year, or from a full Reception year to Year 2 in the following year.

Primary education

Children normally begin their schooling at the age of five years, and spend eight years at the primary level.

At government schools during these years the curriculum is based on the Education Department policy *Education for the 21st Century* guidelines, and on teachers knowledge of the way in which children learn and develop. Within this framework teachers provide for the development of a broad range of knowledge, skills, attitudes and understanding in the areas of languages (English and languages other than English), Mathematics, Science, the Arts, Society and Environment, Health and Personal Development, and Technology. Children are encouraged to take an active part in their own learning, and the aim is to provide a broad and balanced education for all students.

Non–government primary schools largely follow the government schools in their curricula, however, the Education Department exercises no formal authority over these schools beyond requiring them to submit certain statistical returns relating to compulsory attendance.

Secondary education

Students who have completed Year 7 in primary school are required to attend a secondary school until they turn fifteen. Students living in urban areas who attend government high schools usually attend their local high school.

In country areas government secondary education is provided by area schools or high schools, depending on the size of the population being served. Area schools cater for both primary and secondary students, whereas high schools provide courses for secondary students only. Both area and high schools offer students a broad secondary curriculum. This may be provided within individual schools, through the Open Access College and through cooperative arrangements between schools.

Non–government schools may also provide courses in technical, business and commercial, and general education, together with academic courses for those seeking admission to tertiary education after Year 12. Typing, shorthand, computing studies and certain academic courses are provided at privately owned business colleges.

Opportunities exist for students to study in a single–sex environment. There are three girls secondary schools within the Education Department and numerous separate girls and boys schools in the Catholic Education and Independent Schools sectors.

In mid–1993, 19 TAFE Colleges merged to form 10 Institutes of Vocational Education. *See* Chapter 6 for further details. The photographs in this section give a glimpse of the range of courses available.

(Photographs courtesy of the Photographic Unit, Centre for Applied Learning Systems (CALS), Adelaide Institute of Vocational Education)

TAFE award courses are part of the programs offered by Institutes of Vocational Education.

You can choose from over 300 TAFE courses and become qualified for a wide range of occupations. Child Care and Commercial Art are two of the many options.

TAFE programs are part of South Australia's working life.

Industry helps set the content of the relevant TAFE course. The programs include theory and practice in the work skills needed.

Re–training courses are tailored to match the needs of the industry. These programs meet the requirements of the Training Guarantee legislation.

Courses can be held in any suitable venue as well as on campus. A workplace venue is shown here.

The electronic classroom is an important part of the operations of all Institutes. The TAFE Channel brings training and video conferencing links to many campuses.

Working with computers is an integral part of most courses.

The Regency Institute provides world class hospitality training.

Through an agreement with the Swiss Hotels Association and world renowned Le Cordon Bleu Ecole de Cuisine of Paris, the Institute is providing Pacific Rim countries with training in international hotel management. All aspects of hotel operations are covered.

The Parafield Airport campus offers commercial pilot training as well as aircraft engineering.

These are two of the many courses also offered to international students.

Regional Institute campuses serve the needs of rural industry and business as well as the local community.

A wide range of courses covering primary production are available.

During the first three years of secondary education at government schools, students are introduced to a wide range of subjects within the required areas of study. Each school is free to develop its own combination of subjects within the framework provided by departmental guidelines.

Specialisation increases in Years 11 and 12 but the compulsory curriculum pattern of the South Australian Certificate of Education (SACE) ensures that a broadly based education is provided. Work education is provided across the curriculum in various forms.

Over the past six years there has been a policy to encourage young students to remain longer at school, and to encourage adults to re–enter school to complete their secondary schooling. This has been a contributing factor in the 24.5 per cent increase during this period in the number of full–time students remaining at school, either to complete their senior secondary education or to repeat Year 12 to try to qualify for a particular field of study.

Numbers of Full–time Students in Year 12

	Year		
Category of school	*1990*	*1991*	*1992*
Female:			
Government	5,331	5,758	6,203
Non–government	2,516	2,726	2,800
Total	*7,847*	*8,484*	*9,003*
Male:			
Government	4,803	5,718	6,292
Non–government	2,328	2,554	2,600
Total	*7,131*	*8,272*	*8,892*

The apparent retention rate (the number of students at a particular level of secondary schooling expressed as a percentage of the size of the same group when in Year 8) is another indicator of demand for certificated education.

In 1984 the overall retention rate for full–time students in Year 12 was 50.1 per cent. By 1987 this had risen to 60.2 per cent, being 53.4 per cent in government schools and 88.2 per cent in non–government schools. In 1992 the retention rate for Year 12 was 87.6 per cent in government schools and 107.1 per cent in non–government schools.

There has also been a dramatic increase in the number of part–time students, most of whom attend government schools, particularly the Open Access College.

Almost 30 per cent of secondary school students attended non–government schools.

Upper secondary curriculum and assessment

The historical similarity between courses in government and non–government secondary schools before 1984 was the result of a number of influences, including the Public Examinations Board of South Australia and its control over syllabuses and examinations.

In 1984 responsibility for syllabuses and assessment in Year 12 of schooling was taken over by the Senior Secondary Assessment Board of South Australia (SSABSA). Assessment then moved away from essentially sole reliance on public examinations to a mixture of public examinations and school assessment.

In 1992 Stage 1 of the new South Australian Certificate of Education (SACE) was introduced. The SACE includes compulsory studies in English or English as a Second Language, Australian Studies, Mathematics, Arts/Humanities/Social and Cultural studies, the Mathematics/Science/Technology areas, Language Rich Studies and studies from the Quantitative/Experimental areas.

The SACE requires that students study 22 units taken from Stage 1 and Stage 2 and be successful in at least 16. Students who studied Year 11 in 1992 will be issued with the first SACE certificates in January 1994. There is no time limit associated with the completion of the SACE.

Assessment of Year 12 will be unchanged, but the curriculum has changed to reflect the importance of students learning to learn, rather than memorising information.

The SACE, in acknowledging the diversity of students now completing senior secondary education, has a number of arrangements in place with Institutes of Vocational Education. Details regarding the credit transfer arrangements of specific subjects are published each year in the SSABSA Handbook. A number of subjects available within TAFE courses receive recognition within the SACE pattern, further enhancing the study pathways available and providing additional certificate completion options for students in South Australia.

Open Access College

A multi–campus college, the Open Access College consists of three schools of distance education, the Open Access Materials Unit, and Outreach Education Services. Two of the schools (Reception to Year 10 and Senior Secondary) and the Open Access Materials Unit are co–sited with the Marden Senior College. The third school, covering Reception to Year 12, is located at Port Augusta.

The schools provide educational services for geographically remote and isolated families as well as isolated students who are not able to attend their local school. Students already enrolled at a school may enrol for specific subjects not available at their school but offered by the college. The college is an identified adult re–entry school.

Special education

The Education Department provides Special Education Support for students with disabilities in a variety of educational settings. The settings include special schools, special classes, centres for hearing impaired students, and the neighbourhood school. The general policy is that students with disabilities should attend a setting which is appropriate to their curriculum needs.

Special Education provisions may include access to transport, a visiting teacher service, a school–based special education teacher or specialised equipment or materials. Some students with disabilities require the support services of other government or non–government agencies such as therapy services. The Education Department works in collaboration with these agencies to ensure effective coordinated delivery of services.

Special Education also is available within the Catholic and Independent sectors and there are four non–government special schools.

Multiculturalism in education

Multiculturalism in education focuses on the development and implementation of policies, programs and practices which promote cultural inclusivity in South Australian schools and support the learning needs of students from non–English speaking backgrounds.

The provision of English as a Second Language programs for students from non–English speaking backgrounds, particularly those who are new arrivals in Australia, together with the provision of programs in languages other than English, constitute major strategies in the pursuit of a culturally inclusive education for all students.

Aboriginal education

The Aboriginal Education Unit of the Education Department has responsibility for the implementation of the National Aboriginal and Torres Strait Islander Education Policy, the Social Justice Strategy and relevant recommendations arising from the Royal Commission into Black Deaths in Custody. The Unit provides support to Aboriginal students and their teachers, and supports the implementation of Aboriginal Studies across the State, including the development of curricula for Aboriginal schools. Operational control of Anangu (north–west) schools by local Aboriginal people through the Pitjantjatjara–Yankunytjatjara Ecuation Committee is being phased in over the next few years.

Aboriginal Education employs specialist staff, the majority of whom are Aboriginal Education Workers based in schools across the State. The number of full–time Aboriginal students rose from 3,822 in 1989 to 4,653 in 1992, with 94.7 per cent attending government schools. Aboriginal students comprised 1.9 per cent of the total school population.

Post–secondary education

Post–secondary education covers higher education at universities, vocational education at Institutes of Vocational Education, community and neighbourhood studies, on–the–job training and personal development.

The main governmental authorities which take responsibility for this education are the Commonwealth Department of Employment, Education and Training (DEET) (including its many programs designed to improve training for and access to the labour market) and the Office of Vocational Education, Employment and Training within DEET (SA).

Community adult education

Community and adult education is generally provided, in response to community demand, by Institutes of Vocational Education and non–government community groups such as the Workers' Educational Association, community and neighbourhood houses and centres, and ethnic, church and welfare groups.

In 1990 the State Government announced the establishment of a Community Adult Education Program (CAEP) as a social justice initiative. The CAEP funds are available to the non–government sector for programs designed for those who are socially, economically or educationally disadvantaged and are unable or unwilling to attend courses offered at Institutes of Vocational Education or other government institutions. The programs offered include literacy and English conversation, educational and vocational re–entry, basic adult social education, communication skills and parent education.

The funds available to the non–government sector have grown significantly in the past six years, from $125,000 in 1988 to $790,000 in 1993. They comprise both Commonwealth and State funds. Until 30 June 1992 the CAEP funds were allocated by the Office of Tertiary Education (OTE). In July 1992 certain functions of the Office, including community adult education, were integrated into the Department of Education, Employment and Training (SA).

Funding for the community based literacy programs is also provided from the Commonwealth's Australian Language and Literacy Policy funds.

Inservice training

The Department of Education, Employment and Training (SA) administers the Government's employment and training policies, including programs specifically designed to benefit youth, through the Employment and Training Division. The Department's Industrial and Commercial Training Commission provides staff to undertake training supervisory duties throughout the State. The Commission evaluates training already being provided, develops trainee schemes, examines the training needs of special groups, organises and supervises contracts, encourages skills centres for off–the–job training and advises the Minister on training matters.

A major part of the Commission's work concerns the administration and supervision of traineeships. Although the Commission does not provide training or technical education it has the statutory responsibility to determine the training and courses of instruction to be undertaken by other trainees. It is also required to approve the training providers in both the public and private employment sectors.

Apprenticeships and Traineeships[(a)]

Particulars	*1991–92*	*1992–93*
Traineeships commenced	2,582	2,797
Training completed	4,198	4,262
Training cancelled	880	935
Trainees employed	12,166	11,064

(a) Apprenticeships and traineeships were amalgamated in 1991–92.

Vocational education

The Office of Vocational Education, Employment and Training within DEET (SA) is responsible for a wide range of tertiary education conducted through its ten Institutes of Vocational Education. The Institutes were formed in 1993 with the merging of 19 former TAFE colleges across the State. Most vocational training is undertaken in this sector.

More than 340 part–time and full–time TAFE courses are offered either within an Institute campus or by distance education, or by using the Open Learning Program which is a mixture of both.

Courses are tailored to meet the needs of industry, commerce and government sectors. These courses range from the Introduction to Vocational Education certificate through to diploma level providing a clear career pathway. Credit transfer arrangements in an increasing number of disciplines have been developed between TAFE and university courses. In this way students are able to progress through stages to achieve degree status.

Vocational education certificate courses enable students to prepare for employment or to decide on further study to achieve their career goals.

Vocational Education : Student Enrolments by Program

Program	*1990*	*1991*	*1992*
Vocational	62,694	61,910	62,545
Foundation	16,262	13,819	13,476
Community and adult education	22,060	18,575	15,376
Reconciled total (a)	*94,383*	*89,794*	*87,775*

(a) Includes students who are enrolled across program areas.

Higher education institutions

The three universities in South Australia are autonomous bodies which were established under State legislation but which are largely funded by the Commonwealth under the *Higher Education Funding Act 1988* (Cwlth). Just under 20 per cent of the universities' income is provided by students under the Higher Education Contribution Scheme (HECS).

Students

Total student numbers in South Australian Universities grew from 42,935 in 1991 to 44,285 in 1992, although enrolments of commencing students decreased by 8.9 per cent to 15,469. The growth in equivalent full–time student units (EFTSU) was 1.7 per cent to 34,854 in 1992. In 1992, 54.3 per cent of all enrolments and 55.5 per cent of commencing enrolments were females. This proportion has been consistent since 1988.

Staff and student population

The following tables give an overview of the student and staff population of the institutions of higher education in 1992 and show where the demand for resources is concentrated.

All Students by Institution and Level of Course, 1992

	Higher degree		*Other than higher degree*			
Institution	*Research*	*Course work*	*Post-graduate*	*Bachelor*	*Other (a)*	*Total*
Flinders University	436	532	793	8,346	566	10,673
University of Adelaide	1,091	463	701	10,064	839	13,158
University of South Australia	280	684	2,650	14,372	2,468	20,454
Total	*1,807*	*1,679*	*4,144*	*32,782*	*3,873*	*44,285*

(a) Includes students enrolled in non–award and enabling courses.

All Students by Institution and Field of Study, 1992

Field of study	University			
	Flinders	Adelaide	South Australia	Total
Agriculture, animal husbandry	–	1,296	149	1,445
Architecture, building	–	260	769	1,029
Arts, humanities, social sciences	3,357	3,616	3,649	10,622
Business administration, economics	1,481	1,317	4,670	7,468
Education	1,118	450	4,492	6,060
Engineering, surveying	44	1,104	1,912	3,060
Health	2,946	1,378	3,379	7,703
Law, legal studies	17	856	146	1,019
Science	1,620	2,695	1,234	5,549
Non–award	90	186	54	330
Total	*10,673*	*13,158*	*20,454*	*44,285*

All Students by Institution, Type of Enrolment and Sex, 1992

University	Type of enrolment			Sex	
	Full–time	Part–time	External	Males	Females
Flinders University	6,248	3,743	682	4,056	6,617
University of Adelaide	9,621	3,011	526	7,239	5,919
University of South Australia	10,964	6,896	2,594	8,968	11,486
Total	*26,833*	*13,650*	*3,802*	*20,263*	*24,022*

Staff Numbers by Institution, Function and Sex, 1992

University	Function				Sex	
	Teaching only	Research only	Research/ teaching	Other	Males	Females
Flinders University	–	192	592	775	783	776
University of Adelaide	118	154	777	1,558	1,450	1,157
University of South Australia	–	30	1,087	1,080	1,142	1,055
Total	*118*	*376*	*2,456*	*3,413*	*3,375*	*2,988*

University of Adelaide

The University of Adelaide was established in 1874, and the academic work of the University began in March 1876. Courses in Law were introduced in 1883 and Medicine in 1885.

On 1 January 1991 the University amalgamated with Roseworthy Agricultural College and the City campus of the South Australian College of Advanced Education. As a result of the amalgamation the Faculty of Agricultural and National Resource Sciences and the Faculty of Performing Arts were created, and the Faculty of Arts experienced considerable growth. The Faculty of Agricultural and National Resource Sciences is predominantly based at the Roseworthy and Waite campuses.

In 1993 there were eleven faculties at the University. Higher degrees are offered in all faculties. Postgraduate diploma courses are provided in approximately twenty disciplines ranging from Archaeology to Clinical Dentistry, and Mathematical Science to Jazz. Further education programs are conducted through the University's radio station 5UV and the Office of Continuing Education.

Flinders University

Initially planned as an extension of the University of Adelaide on a site eleven kilometres from the centre of Adelaide, 'The Flinders University of South Australia' was given full autonomy by the South Australian Government in 1965.

On 1 January 1991 the Flinders University merged with the Sturt campus of the former South Australian College of Advanced Education. From July 1992 the University has aggregated its nine schools and Board of Studies in Theology into four faculties which have become the principal academic units of the University.

The University offers tuition in courses leading up to 18 different bachelor degrees and 31 master degrees. Doctorates may be conferred in Philosophy, Letters, Science and Medicine. The University also offers ten postgraduate diplomas and three postgraduate bachelor degrees.

University of South Australia

The University of South Australia was established on 1 January 1991 as South Australia's third and largest (in terms of student numbers) University. It was formed by the merger of the Salisbury, Magill and Underdale campuses of the former South Australian College of Advanced Education and the Whyalla, North Terrace and Levels campuses of the South Australian Institute of Technology.

The University offers a wide range of courses in Aboriginal Studies, Architecture, Art, Arts and Humanities, Biomedical Sciences, Business and Economics, Communication, Design, Education, Engineering, Health Sciences, International Studies, Journalism, Legal Studies, Nursing Studies, Recreation, Science, Social Sciences, Technology, Wildlife and Park Management, and Women's Studies. Courses are available at associate diploma, degree and postgraduate levels.

At the postgraduate level doctoral and masters programs are available by research, together with a number of masters degrees by coursework. There is also a wide range of graduate diploma and graduate certificate courses available by coursework.

Outlays on education

The Commonwealth Government, the State Government and various private benefactors provide assistance to various categories of primary, secondary and tertiary students.

Government

Government funds and facilities are provided by the Department of Education, Employment and Training (SA), the Department of Housing and Construction (which is responsible for the purchase, maintenance and security of all DEET (SA) buildings), the Commonwealth Department of Employment, Education

and Training (which directs funding through its portfolio), and local government (which may receive grants for community education, or may fund such activities independently). Other sources include the Departments of Family and Community Services, Primary Industries, Environment and Natural Resources, Premier and Cabinet, Engineering and Water Supply, and Attorney–General.

The Commonwealth Government provides a Scheme of Assistance for Isolated Children and through the AUSTUDY scheme provides income and assets tested assistance to secondary and tertiary students aged sixteen years or more. The ABSTUDY scheme gives assistance to full–time secondary and tertiary Aboriginal students.

The State Government provides a School Support Grant to all government schools on a per head basis. The Education Department spends approximately 57.9 per cent of its recurrent expenditure on salaries for teachers, 23.5 per cent on other salaries, 13.5 per cent on non–salary expenditure and 5.1 per cent on other recurrent payments.

Grants of assistance totalling $50.2 million were paid in 1992 to both government and non–government schools, including $20.7 million for per capita grants, $8.2 million for needs of schools, and $19.3 million for needs of students. This included administration of the School Card Concession Scheme. Approvals for this scheme rose from 15.0 per cent of all enrolments in 1982 to 18.9 per cent in 1987 and 31.6 per cent in 1992.

Assistance for postgraduate students is provided in the form of research grants and postgraduate awards and scholarships.

Commonwealth Grants Received for Educational Purposes
($ million)

Purpose	*1989–90*	*1990–91*	*1991–92*
Current grants:			
Primary and secondary	140	152	191
Tertiary;			
University and other higher	210	233	235
Technical and further	12	13	18
Other	4	2	6
Total current grants	*367*	*400*	*449*
Capital grants:			
Primary and secondary	20	21	25
Tertiary;			
University and other higher	7	12	12
Technical and further	15	23	14
Other	2	–	–
Total capital grants	*44*	*55*	*51*
Total grants	**411**	**455**	**500**

State and Local Government : Outlay on Education
($ million)

Purpose	*1989–90*	*1990–91*	*1991–92*
Current outlay:			
Primary and secondary	804	873	916
Tertiary;			
University and other higher	257	318	345
Technical and further	122	134	179
Tertiary n.e.c.	1	1	1
Pre–school education and education not defined by level	64	71	81
Transportation of students	28	38	37
Other	2	2	1
Total current outlay	*1,279*	*1,438*	*1,561*
Capital outlay:			
Primary and secondary	46	62	60
Tertiary;			
University and other higher	25	13	13
Technical and further	21	32	17
Pre–school education and education not defined by level	2	3	3
Transportation of students	6	2	–
Other	–	–	–
Total capital outlay	*99*	*112*	*94*

Private

Private benefactors provide assistance to various types of educational institutions and students. Voluntary helpers provide an auxiliary staff function in both government and non–government schools. Many institutions benefit from endowments. Education and training in specific areas is provided through the print and audio/video media by both profit and non–profit bodies. These bodies include the Workers' Educational Association, trade unions, business and professional associations, church and welfare groups, cultural and sporting associations and interest groups involved with the maintenance of civil defence.

Further references

Additional information may be found in the following publications:

4221.0 *Schools, Australia*
5510.0 *Expenditure on Education, Australia*
6227.0 *Transition from Education to Work, Australia*
6235.0 *Labour Force Status and Educational Attainment, Australia*
6272.0 *Participation in Education, Australia*
6353.0 *Employer Training Expenditure, Australia*

6.2 SCIENTIFIC AND RESEARCH ORGANISATIONS

CSIRO

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is an independent statutory authority established and operating under the *Science and Industry Research Act 1949* (Cwlth). CSIRO is Australia's largest scientific research organisation. Its role is to develop and improve technologies to benefit Australian industry, people and environment.

Research in CSIRO is carried out in 35 Divisions and Units, within six Institutes, throughout Australia. The Institute of Plant Production and Processing and the Divisions of Horticulture, Human Nutrition, Soils and Water Resources have their headquarters in South Australia. The Divisions of Manufacturing Technology, Mathematics and Statistics and Entomology have laboratories in Adelaide and the Division of Forestry's Plantation Research Centre is at Mount Gambier.

In 1992 there were 368 people working for CSIRO in South Australia as scientists, technicians, administrative and support staff.

Horticulture

The Division of Horticulture undertakes production and post–harvest research on Australian horticultural crops of the temperate, subtropical and tropical zones. The aim is to improve quality, efficiency and sustainability of horticultural production on–farm and improve product specification and post–harvest handling off–farm. The Division's work centres around high value crops where maintenance and harvest can be mechanised for maximum efficiency and return to the grower.

Work in the Adelaide laboratory is concentrated on the use of molecular biology for plant improvement and the physiology of the interaction of plants with the environment.

Human nutrition

The Division of Human Nutrition has its headquarters and main laboratories in the grounds of Adelaide University, and has further facilities at its 'Glenthorne' property at O'Halloran Hill. The Division carries out research into the nutritional factors involved in heart disease, high blood pressure, cancer and obesity. There are also major programs in growth–promoting factors, dietary facts, dietary fibre, and environmental health.

The Division operates on an annual budget of approximately $8 million, one–third of which is externally sourced. The main client groups are rural industry, research and development corporations, the pharmaceutical and food industries, and public health bodies such as the Anti–Cancer and National Heart Foundations.

Soils

The Division of Soils has its headquarters in Adelaide, with laboratories in Canberra, Perth and Townsville. It is allied with the SA Research and Development Institute and the University of Adelaide in a Cooperative Research Centre for Soil and Land Management.

Manufacturing technology

The Division of Manufacturing Technology has its headquarters in Preston, Victoria, with laboratories at Woodville North, Lindfield (NSW) and Pinjarra Hills (Qld). The Adelaide laboratory conducts research into joining and fabrication technology, production management systems, and surface engineering.

Water resources

The Division provides public agencies and the private sector with improved methods for the definition, use and management of Australia's water resources. Of particular importance is the maintenance of the quantity and quality of urban, rural and industrial water supplies. The Division's headquarters is in Adelaide, with laboratories in Perth, Griffith and Canberra. Some staff are also based at the Murray Darling Freshwater Research Centre in Albury. The Adelaide laboratory has a close association with the Adelaide–based Centre for Groundwater Studies, and conducts research in a range of groundwater and salinity issues. The laboratory also provides a world class commercial isotope analysis service.

DSTO Salisbury

The Defence Science and Technology Organisation (DSTO) is the research and development arm of the Australian Department of Defence, providing scientific and technological support for the Australian Defence Force (ADF).

The DSTO complex at Salisbury is Australia's largest research centre, specialising in electronics and surveillance. Approximately 1,800 DSTO scientists, engineers and support staff are employed, whilst numerous defence industries and elements of the ADF are also housed on the site.

DSTO's research Divisions at Salisbury,

High Frequency Radar
Communication
Microwave Radar
Guided Weapons
Optoelectronics
Information Technology
Electronic Warfare

have achieved international acclaim for innovation and research excellence. (DSTO's Melbourne–based Materials Research Laboratory and Aeronautical Research Laboratory also have components based at Salisbury.)

Among the major projects at Salisbury are:

— JINDALEE, the over–the–horizon surveillance radar;
— AUSAR, the synthetic aperture radar;
— LADS, the laser airborne depth sounder;
— NULKA anti–ship missile decoy; and
— KARIWARA, the towed array for detecting submarines.

DSTO transfers technology, and development work, to industry and provides strong support to higher education institutions. The wider community benefits from DSTO technologies – LADS discovered a large unchartered shoal, making maritime travel in South Australian waters safer, and the Jindalee radar also provides Customs and Immigration surveillance of Australia's northern shores as well as providing critical weather predictions for meteorological authorities.

DSTO has extensive interaction with overseas research institutes and industry and is regarded internationally as being at the forefront of defence science research.

Department of Defence

Woomera

The Woomera Range was established in 1947 as a site for testing experimental ballistic and guided weapons. Defence and other trials, training and exercises are still carried out in the Woomera Prohibited Area although at a much reduced level than in the past. The major activity in Woomera now centres around the Australia/United States Joint Defence Facility, Nurrungar. This facility employs some 500 persons and is part of the US Defence Support Program which provides ballistic missile early warning and other information related to missile launches, surveillance and the detonation of nuclear weapons. The Defence Support Centre Woomera provides a residential and support base for the Joint Defence Facility, Nurrungar and support to Defence activities at the Woomera Range.

The Australian Wine Research Institute

The Australian Wine Research Institute, established in 1955 from a small research unit formed within the University of Adelaide in 1934, promotes research and other scientific work for the Australian wine industry.

The Institute is administered by a ten–member council consisting of representatives from the Australian wine industry, the Commonwealth Scientific and Industrial Research Organisation, the University of Adelaide, the Charles Sturt University, with the Director of the Institute an ex–officio member. It is funded by the Grape and Wine Research and Development Corporation, income from a trust fund, and commercial activities.

At its laboratories situated at Urrbrae, the Institute conducts applied research into the microbiology and chemistry of the production of wine and brandy. Extension services assist commercial winemakers with technical problems, provide tested yeast and bacterial cultures for wine fermentation and communicate research developments to the wine industry. Analytical services are also offered, for a fee.

The John Fornachon Memorial Library maintained by the Institute is a specialised library of technical literature on wine and grapes.

MFP Development Corporation (MFP Australia)

MFP Australia is an international project with a core site in Adelaide, South Australia. The project is to be a model for new industries, environmental management, and uban lifestyles for the 21st Century. The MFP Project will create business investment and employment in the growth industries of the future – environmental management, education and training, and information technology and telecommunications. The Project was established by the Commonwealth and South Australian Governments in July 1991.

MFP Australia also manages South Australia's two research parks, Technology Park Adelaide and Science Park Adelaide. Both research parks have been developed to provide a supportive environment for research and development and the commercialisation of new technology.

Technology Park Adelaide, adjacent to the Levels campus of the University of South Australia, provides a particular focus for companies working in information technology and telecommunications, electronics and space related activities.

The Adelaide Microelectronics Centre, located at Technology Park Adelaide and supported by the National Industry Extension Scheme, facilitates industry access to and promotes greater industry awareness and application of electronics technology.

The Signal Processing Research Institute, also based at Technology Park Adelaide, is a joint venture between the MFP Australia and South Australia's three Universities. It is a centre of excellence in signal and information processing research, development and education.

Science Park Adelaide, a joint venture with and adjacent to the Flinders University of South Australia, provides a focus for companies working in health and medical technologies and research and scientific instrumentation.

The South Australian Government offers generous financial support and concessions for approved commercial operations within the MFP Project and the two research parks.

Other research activities

Amdel Limited

Amdel Limited is involved in mineral technology and materials services. Available services include the design and manufacture of analytical instrumentation, mineral processing testwork at bench and pilot scale, geological services and geoanalytical and environmental analysis. Materials services provided are testing, product and quality control, and failure analysis.

IMVS

The Institute of Medical and Veterinary Science (IMVS), which is subject to control and direction of the Minister of Health under the *Institute of Medical and Veterinary Science Act 1982*, provides diagnostic facilities in all branches of laboratory medicine for the Royal Adelaide Hospital and other metropolitan and country hospitals, public health authorities, industry, and private practitioners. It undertakes some work in veterinary pathology for the Department of Primary Industry (SA). Research is conducted into selected problems connected with human disease. The staff of the Institute take part in the teaching of the medical sciences to graduates, students and technicians.

At the Royal Adelaide Hospital the Institute operates a Blood Transfusion Service, and undertakes all required autopsies. Institute medical staff also take an active part in patient care by providing the clinical requirements of certain wards of the Royal Adelaide Hospital. To meet the need for laboratory services and blood transfusions in rural areas, the Institute operates eleven regional laboratories.

The Institute's research and development projects are assisted by the National Health and Medical Research Council, other research–funding bodies, certain private firms and benefactors.

Medvet Science Pty Ltd is the associated private company set up to market the intellectual property of the medical and scientific staff of the IMVS.

The Institute administers the Hanson Centre for Cancer Research. This Centre comprises a series of research laboratories which are shared between the Institute and Royal Adelaide Hospital. The Hanson Centre has been established for the specific purpose of conducting research into various aspects of cancer.

The University of Adelaide

The University places strong emphasis on research and has the growth of graduate education as a major strategic objective. The research activities of the University attract considerable outside funding in addition to Commonwealth recurrent funding for teaching and research. Grants totalling $27 million were awarded to the University for 1993 with $7.8 million from the Australian Research Council. The University also receives substantial research funding from the National Health and Medical Research Council, the Grains Research and Development Corporation for South Australia and the Australian Wool Corporation.

All academic staff members are engaged to undertake research. Significant concentrations of research work are to be found in the Co–operative Research Centres for Materials Welding and Joining, Sensor Signal and Information Processing, Soil and Land Management, Tissue Growth and Repair, and Viticulture, Australian Petroleum, New Technologies for Power Generation from Low–rank Coal and the Research Data Network CRC. Examples of other research centres are the Centres for Amphibian Studies, Basic and Applied Plant Molecular Biology and South Australian Economic Studies. Research units include the Dental Statistics and Research Unit, the Research Centre for Women's Studies, the Teletraffic Research Centre and the Road Accident Research Unit.

To encourage technology transfer from the University to the market place, Luminis Pty Ltd was established in 1984 to seek out new opportunities for contract research and consulting.

The University is seeking to further the relationship between its research function and the market place through the creation in 1993 of an Office of Industry Liaison to complement the establishment of a Research and Commerce Precinct in the Adelaide suburb of Thebarton in 1992. This fourth campus of the University brings together commercial tenants involved in research and development. Bresatec Ltd, Amdel Ltd and ETSA's Telecommunications Unit are located alongside University research and postgraduate activities such as the National Centre for Petroleum Geology and Geophysics and the Co–operative Education for Enterprise Development (CEED) Program.

Waite Institute and Roseworthy College

The Waite Institute was established as a research institute of the University of Adelaide at Urrbrae in 1924, through the generous benefaction of Mr Peter Waite. Roseworthy Agricultural College was founded in 1884 on an agricultural campus at Roseworthy 50 kilometres north of Adelaide. The two organisations were merged in 1991 to form the Faculty of Agricultural and Natural Resource Sciences of the University of Adelaide.

Among the many research programmes currently being undertaken are: case studies of business strategies in agriculture–related industries; the agronomic aspects of minimal tillage and management of legume pastures in rotations; aspects of the physiology, gene mapping and breeding of sheep and cattle; fundamental aspects of the biological control of insects and the resistance of

plants to viral, bacterial and fungal infections; weed control; the biota of the arid zone and use of expert systems for the management of rangelands; the domestication of native plants as ornamentals; viticulture and aspects of the chemistry of wines; plant biotechnology and the breeding of wheat, barley and faba beans; soil biology and fertility in relation to land management and many other projects of vital importance to agriculture in Australia and overseas.

The University of Adelaide Waite Campus is the home of the Special Research Centre for Basic and Applied Plant Molecular Biology, the Cooperative Research Centre for Soil and Land Management and the Cooperative Research Centre for Viticulture, together with the main laboratories of the CSIRO Division of Soils, the CSIRO Division of Horticulture, the South Australian Research and Development Institute and the Australian Wine Research Institute, to form an integrated centre of agricultural research and teaching unique in Australia and comparable with major institutions overseas.

Flinders University

Research is conducted at the University by staff in all nine Schools and in the following specialised research centres: The Flinders Institutes for Atmospheric and Marine Sciences, Atomic Studies, Australasian Geodynamics, the Study of Teaching, and the Study of Learning Difficulties; the Centres for Transfusion Medicine and Immunology, Neuroscience, Health Advancement, Plant Membrane Biology, Research in the New Literatures in English, Development Studies, Groundwater Studies, Multicultural Studies, Scandinavian Studies, South Australian Economic Studies, the National Key Centre for Education and Training on Addiction, the Cancer Research Unit, the National Institute of Labour Studies Inc., the Centre for Electronic Structure of Materials, the National Centre for Petroleum Geology and Geophysics (with the Universities of Adelaide and South Australia), the Liver Research Centre, the Pan Pacific Institute, the National Tidal Facility and the CSIRO/Flinders Joint Research Centre in Information Technology.

Flinders Technologies Pty Ltd has been established to develop and market intellectual property and expertise of the Flinders University. The Company is profitable, having commenced operations in July 1987 as a joint venture between Flinders University and Enterprise Investments Ltd, the venture capital arm of the South Australian Government.

University of South Australia

The University of South Australia has a strong research base with well established research centres in high technology and applied sciences. It is also fostering significant research in the humanities, social sciences and education. Funding, derived from industry and from the government through the Australian Research Council continued to rise sharply as the reputations of the University's research centres have become more widely recognised in Australia and overseas.

The 55–active research groups in 1992 include the Particle and Surface Technology Research Group, the Digital Communications Group, the Agricultural Machinery Research and Design Centre, the Surface Engineering Research Group, the Aboriginal Research Institute, the Sensor Science Engineering Group, the Centre for Advanced Manufacturing Research Group, the Education and Social Justice Research Group and the Centre for Advanced Biomedical and Pharmaceutical Studies.

The University also participates in two cooperative research centres: The Centre for Sensor Signal and Information Processing and the Australian Petroleum Co–operative Research Centre.

Techsearch, the business development arm of the University, constructively supports, assesses and markets the intellectual products and services of the University within Australia and overseas, provides professional growth opportunities for University staff and initiates infrastructural developments complementing the University's profile. Techsearch promotes the expertise and physical resources of the University.

Other bodies

South Australian Research and Development Institute (SARDI)

SARDI is a research and development organisation established by the South Australian Government as a leading focus for economic development. SARDI was formed by the amalgamation of the research components of the former Departments of Fisheries, Agriculture, and Woods and Forests. SARDI's charter is to fulfill the needs of primary industries and to ensure its natural resource base is maintained. SARDI's research is applied towards providing practical solutions for South Australia's primary industries.

The current research areas in SARDI are:

- aquatic science: fisheries, aquaculture, ecological and environmental studies of aquatic habitats and oceanography;
- crops: cereal and grain legume breeding, weeds, pathology and crop evaluation and agronomy;
- pastures: breeding, agronomy and soil and land management;
- livestock: sheep, dairy, beef, pigs and poultry;
- horticulture.

Department of Primary Industries (SA) – Forestry

The commercial forest industries in South Australia are mostly dependent on a single softwood species. This necessitates continued research into the sustainability and long-term improvement of *Pinus radiata* plantation resources, and forestry in general, in ways that are cost–efficient as well as sound ecologically and has undertaken research for private industry and government agencies. The Group maintains a research team of forest scientists and technicians who specialise in applied research and who cooperate in technology transfer. Research will eventually be directed from the South Australian Research and Development Institute, formed in 1993. The team has worked closely with the CSIRO Division of Forestry, Plantation Forestry Research Station at Mount Gambier for more than 50 years.

The Group has followed a holistic approach and cooperative research continues to be undertaken with external research agencies. These agencies include the Co–operative Research Centre for Soil and Landcare and CSIRO Divisions of Soils and Water Resources (Centre for Groundwater Studies), the Waite and Roseworthy Campus of the University of Adelaide, Flinders University, Departments of Forestry at the University of Melbourne and Australian National University, and the University of South Australia.

The Group participates in research into advanced generation breeding of pine and eucalypt species coordinated by the Southern Tree Breeding Association, the national tree breeding cooperative, of which the Group, as the Woods and Forests Department, was a founder member. The Group has expertise in the determination of breeding values for milling and wood quality characteristics of timber products.

Forestry research aims to increase the productivity of commercial plantations through practical, cost–effective methods which, through site–specific application, achieve ecologically sustainable development of the natural resource. It includes research into forest management and inventory systems needed for long–term planning and regulation of timber yields. Other research is directed at forestry practices needed for environmental protection and management practices able to maintain or enhance the integrity and biodiversity of native forest reserves.

The Group is a Registered Research Agency. A recent innovation has been to conduct research into the growth and suitability of native hardwood species suited to the disposal or re–use of effluent waste waters and the production of commercial timbers, mainly in the semi–arid zone of the State.

Australian Centre for Medical Laser Technology Inc.

The Australian Centre for Medical Laser Technology Inc. is an independent, non–profit organisation which has been established to promote the safe and effective use of medical lasers.

It is Australia's first national medical laser centre which aims to establish national training programmes, provide information on the research and development of new technologies and their applications, and accreditation facilities.

As well as working with major hospitals throughout Australia and the University of South Australia, the Australian Centre for Medical Laser Technology is also a collaborative centre of the Australian Institute of Health.

Expenditure on research and experimental development

The United Nations Organisation of Economic Cooperation and Development defines Research and Development as comprising creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications. The Australian Bureau of Statistics follows these guidelines, and provides comprehensive data on research and experimental development activities through the publications listed at the end of this chapter.

South Australia continues to be ranked fifth in Australia in terms of business expenditure on research and development within the State. In 1991–92 total research and development expenditure for all industries except agriculture rose by 8.0 per cent from $111.7 million to $120.6 million, with the private sector contribution falling from 97.1 to 96.4 per cent of the total. Research and development expenditure in manufacturing rose from $88.6 million to $93.6 million. The main change for all industries was a rise of 90.0 per cent in mining.

Another significant change occurred in the area of research and scientific institution businesses, where research and development expenditure rose by 50.2 per cent to $7.8 million.

Research and Development Expenditure by Business Enterprises[a]

Industry of Enterprise				
ASIC Code	*Description*	*1990–91*	*1991–92*	*Percentage change*
11–15	**Mining (excluding services to mining)**	**959**	**1,822**	**90.0**
	Manufacturing:			
21	Food, beverages and tobacco	1,453	1,210	–16.7
23–24	Textiles, clothing and footwear	n.p.	n.p.	n.a.
25	Wood, wood products and furniture	1,479	1,214	–17.9
26	Paper, paper products, printing and publishing	n.p.	1,354	n.a.
27	Chemical, petroleum and coal products	7,280	9,477	30.2
28	Non–metallic mineral products	n.p.	686	n.a.
29	Basic metal products	3,961	3,746	–5.4
31	Fabricated metal products	2,830	2,339	–17.3
32	Transport equipment	27,851	28,012	0.6
334	Photographic, professional and scientific quipment	1,208	1,355	12.2
335	Appliances and electrical equipment	27,721	29,229	5.4
336	Industrial machinery and equipment	2,750	n.p.	n.a.
34	Miscellaneous manufacturing	9,410	10,900	15.8
C	**Total manufacturing**	**88,643**	**93,594**	**5.6**
	Other industries:			
F	Wholesale and retail trade	4,103	4,759	16.0
61–62	Finance	626	n.p.	n.a.
63	Property and business services	7,414	6,523	–12.0
8461	Research and scientific institutions	5,211	7,826	50.2
	Other n.e.c.	4,756	n.p.	n.a.
	Total other industries	**22,110**	**25,213**	**14.0**
TOTAL ALL INDUSTRIES		**111,712**	**120,629**	**8.0**
Private sector		108,523	116,276	7.1

Further references

Additional information may be found in the following publications.

8104.0 *Research and Experimental Development, Business Enterprises, Australia*

8109.0 *Research and Experimental Development, General Government and Private Non–profit Organisations, Australia*

8111.0 *Research and Experimental Development, Higher Education Organisations, Australia*

8112.0 *Research and Experimental Development, All–Sector Summary, Australia*

8114.0 *Research and Experimental Development, Business Enterprises (Inter Year Survey), Australia*

8122.0 *Research and Experimental Development, All–Sector Summary, Australia (Inter Year Survey)*

Chapter 7

LABOUR

7.1 EMPLOYMENT

The labour force

Particulars of the number of persons who constitute the labour force in South Australia are available from periodic population censuses. For the 1986 Census the definition of the labour force was revised to accord with the recommendations of the Thirteenth International Conference of Labour Statisticians (1982), and the revised approach has been adopted for the monthly labour force survey.

Labour Force Survey

In addition to complete census counts, estimates of the civilian labour force are prepared from the results of surveys based on a sample of dwellings throughout Australia. These surveys began in 1960 on a quarterly basis and were initially confined to the six State capital cities, but in 1964 were extended to include non–metropolitan urban and rural areas, thereby enabling derivation of estimates of the total civilian labour force in Australia. From February 1978, the surveys have been conducted on a monthly basis. The proportion of the population included in the surveys varies from State to State (approximately 0.7 per cent in South Australia) but in aggregate about 0.5 per cent of the Australian population is included.

Statistics obtained from the surveys include numbers employed and unemployed; labour force participation and unemployment rates; duration of unemployment; analyses of reasons for working less than thirty–five hours per week; as well as age, sex, birthplace, family status, occupation and industry characteristics.

Labour Force Status of the Civilian Population Aged 15 Years and Over

May	*Employed*	*Unemployed*	*Labour force*	*Not in labour force*	*Civilian population aged 15 years and over*	*Unemployment rate (a)*	*Participation rate (b)*
	'000	*'000*	*'000*	*'000*	*'000*	*per cent*	*per cent*
			MALES				
1986	364.1	32.3	396.3	134.0	530.3	8.1	74.7
1987	363.0	33.3	396.4	141.3	537.7	8.4	73.7
1988	362.0	34.8	396.7	148.5	545.3	8.8	72.8
1989	379.9	33.3	413.2	140.1	553.2	8.0	74.7
1990	391.3	30.5	421.8	138.4	560.2	7.2	75.3
1991	380.5	41.4	421.9	146.2	568.1	9.8	74.3
1992	368.4	55.3	423.7	151.8	575.5	13.1	73.6
1993	375.8	49.4	425.1	153.0	578.1	11.6	73.5

Labour Force Status of the Civilian Population Aged 15 Years and Over *(continued)*

May	Employed	Unemployed	Labour force	Not in labour force	Civilian population aged 15 years and over	Unemployment rate (a)	Participation rate (b)
	'000	'000	'000	'000	'000	per cent	per cent
FEMALES							
1986	244.1	22.3	266.4	281.9	548.3	8.4	48.6
1987	245.2	25.4	270.6	284.4	555.1	9.4	48.8
1988	257.5	23.2	280.6	282.3	562.9	8.3	49.9
1989	269.0	21.7	290.7	279.5	570.2	7.5	51.0
1990	273.2	21.3	294.6	282.1	576.7	7.2	51.1
1991	277.2	27.7	304.9	279.2	584.1	9.1	52.2
1992	267.5	32.7	300.3	290.7	591.0	10.9	50.8
1993	274.5	26.3	300.8	294.0	594.8	8.8	50.6
PERSONS							
1986	608.1	54.6	662.7	415.9	1,078.6	8.2	61.4
1987	608.2	58.8	667.0	425.7	1,092.8	8.8	61.0
1988	619.4	57.9	677.4	430.8	1,108.2	8.6	61.1
1989	648.9	55.0	703.9	419.6	1,123.4	7.8	62.7
1990	664.5	51.8	716.3	420.5	1,136.8	7.2	63.0
1991	657.7	69.1	726.7	425.4	1,152.2	9.5	63.1
1992	635.9	88.0	724.0	442.5	1,166.5	12.2	62.1
1993	650.2	75.7	725.9	447.0	1,172.9	10.4	61.9

(a) The unemployment rate for any group is the number unemployed expressed as a percentage of the labour force (*i.e.* employed plus unemployed) in the same group. *(b)* The labour force participation rate for any group is the civilian labour force expressed as a percentage of the civilian population aged 15 years and over in the same group.

A revised definition of employed persons was introduced from April 1986. It includes all persons aged 15 years and over who during the survey week worked for one hour or more without pay in a family business or on a farm (*i.e.* unpaid family helpers), whereas before April 1986 only those working 15 hours or more in the survey week were included.

Employed Persons : Status of Worker ('000)

	Wage and salary earners			*Employers and self-employed*		
May	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
1988	289.3	221.2	510.5	68.8	31.7	100.5
1989	310.8	232.0	542.8	65.3	34.4	99.6
1990	322.5	234.6	557.1	66.8	35.0	101.8
1991	306.5	237.4	543.8	69.7	36.1	105.8
1992	293.6	230.3	524.0	71.6	32.7	104.2
1993	294.8	235.4	530.1	76.7	35.5	112.2

The following table shows employed persons classified according to the Australian Standard Classification of Occupations (ASCO), which was introduced in the August 1986 Labour Force Survey. The structure of ASCO is based on the type of work performed and is defined in terms of skill level and specialisation. The classification is broken down into major group, minor group, unit group and individual occupation levels.

Employed Persons : Occupation Major Group, May 1993

Occupation major group (a)	Males	Females	Persons	
			Number	Proportion of total
	'000	'000	'000	per cent
Managers and administrators	64.3	20.9	85.2	13.1
Professionals	50.0	39.7	89.7	13.8
Para–professionals	20.3	21.1	41.5	6.4
Tradespersons	85.6	10.8	96.4	14.8
Clerks	18.4	80.3	98.7	15.2
Salespersons and personal service workers	36.5	62.6	99.1	15.2
Plant and machine operators, and drivers	39.4	5.2	44.6	6.9
Labourers and related workers	61.1	33.9	95.0	14.6
Total	*375.8*	*274.5*	*650.2*	*100.0*

(a) Classified according to the Australian Standard Classification of Occupations.

'Industry' refers to the branch of productive activity, trade or service in which an individual works or carries out an occupation. The Australian Standard Industrial Classification (ASIC), designed primarily as a system for classifying establishments (*e.g.* individual mines, factories, shops etc.) by industry, is used to classify persons in the labour force survey by the industry in which they are employed, as shown in the following table.

Employed Persons : Industry, May 1993

Industry	Males	Females	Persons	
			Number	Proportion of total
	'000	'000	'000	per cent
Agriculture, forestry, fishing etc.	38.9	14.4	53.4	8.2
Mining	4.3	(a)0.9	5.2	0.8
Manufacturing	76.5	22.0	98.5	15.1
Electricity, gas and water	6.8	(a)1.2	8.1	1.2
Construction	33.3	6.3	39.6	6.1
Wholesale and retail trade	72.1	54.4	126.5	19.5
Transport and storage	19.9	4.9	24.7	3.8
Communication	6.4	3.7	10.1	1.6
Finance, business services etc.	28.3	29.1	57.3	8.8
Public administration, defence	16.3	9.9	26.1	4.0
Community services	51.0	101.6	152.7	23.5
Recreation, personal services etc.	21.9	26.0	47.9	7.4
Total	*375.8*	*274.5*	*650.2*	*100.0*

(a) Subject to sampling variability too high for most practical uses.

The following table provides figures for the labour force and participation rates by age group for males and females. Further details may be obtained from the following bulletins: *The Labour Force, Australia, Preliminary* (6202.0); *The Labour Force, Australia* (6203.0). In addition, *Labour Force, South Australia* (6201.4) contains detailed figures for South Australia.

Civilian Labour Force : Age Group, May 1993

Age group (years)	Number ('000)			Participation rate (a) (per cent)		
	Males	Females	Persons	Males	Females	Persons
15–19	26.9	26.8	53.6	52.0	54.2	53.1
20–24	54.0	43.0	97.0	90.2	74.7	82.6
25–34	114.3	76.2	190.5	93.4	64.9	79.4
35–44	104.9	79.6	184.5	94.0	71.6	82.8
45–54	78.1	55.7	133.8	90.9	66.3	78.7
55–59	23.3	11.7	35.0	72.8	36.8	54.9
60–64	15.2	5.2	20.4	48.8	16.5	32.6
65 and over	8.5	2.7	11.2	10.2	2.4	5.7
Total labour force	*425.1*	*300.8*	*725.9*	*73.5*	*50.6*	*61.9*

(a) The participation rate for any group is the civilian labour force expressed as a percentage of the civilian population aged 15 years and over in the same group.

Special studies

The sample of dwellings referred to in respect of the labour force survey provides the framework for a number of special studies. A supplementary survey seeking information about educational attainment was run in association with the February 1993 labour force survey. Similar surveys have been conducted annually since February 1979. Some of the results of the supplementary survey were published in *Labour Force Status and Educational Attainment, Australia, February 1993* (6235.0). The information sought included field of study, year and country in which highest qualification obtained, type of institution attended and whether attendance was for the full academic year.

Educational Attainment : Persons Aged 15 to 69, February 1993

Educational attainment	Employed	Unemployed	Total civilian population	Unemployment rate per cent
With post–school qualifications:	321,754	34,143	428,839	9.6
Degree	73,753	6,644	88,575	8.3
Trade	102,955	10,670	138,442	9.4
Certificate or diploma	141,934	15,796	196,660	10.0
Other	3,112	(a)1,033	5,163	(a)24.9
Without post–school qualifications:	308,855	50,584	555,460	14.1
Attended the highest level of secondary school available	103,215	19,235	157,642	15.7
Did not attend the highest level of secondary school available;	205,368	31,349	396,286	13.2
Left at age,				
18 years and over	2,516	(a)724	5,613	(a)22.4
17 years	17,984	3,110	27,652	14.7
16 years	67,889	9,402	104,778	12.2
15 years	76,275	11,000	139,582	12.6
14 years	26,183	5,030	79,506	16.1
13 years and under	14,520	(a)2,083	39,154	(a)12.5
Never attended school	(a)272	(a)	(a)1,533	(a)
Still at school	9,625	3,687	44,959	27.1
Total	*640,234*	*88,414*	*1,029,259*	*12.1*

(a) Subject to sampling variability too high for most practical uses.

There were 1,029,259 persons aged 15 to 69 in South Australia in February 1993 and 428,839 (41.7%) possessed a post–school qualification. The highest proportion of persons with these qualifications possessed a certificate or diploma (45.9%) followed by persons with trade qualifications (32.3%) and persons with a degree (20.7%).

Employed wage and salary earners

In the September quarter of 1983 a quarterly Survey of Employment and Earnings was introduced to obtain from employers information on the numbers of wage and salary earners employed each month and their quarterly earnings. (The earnings data is input into the estimates of national income for the quarterly Australian National Accounts.) The series provides a measure of occupied jobs with no adjustment for multiple job holding.

The survey covers a sample of private employers and government units. Not all employer groups are covered; the principal exclusions are private employers engaged in agriculture, forestry, fishing and hunting, private households and the permanent defence forces. The series differs from estimates of employed wage and salary earners provided by the Labour Force Survey. For further information see *Employed Wage and Salary Earners, Australia* (6248.0).

Employed Wage and Salary Earners
('000)

	Industry				*Sector*		
					Government		
May	*Manufac-turing*	*Wholesale and retail trade*	*Community services*	*Other*	*Common-wealth*	*State*	*Private*
			MALES				
1987	72.9	47.1	43.1	108.3	26.7	56.0	182.8
1988	73.2	53.7	42.2	113.0	25.9	55.0	195.2
1989	76.7	56.7	41.0	113.6	23.3	55.3	203.6
1990	76.1	53.3	44.7	115.0	22.8	56.0	204.3
1991	72.7	51.7	45.6	111.3	20.6	54.7	199.9
1992	67.5	51.6	44.3	102.0	19.3	53.1	186.6
			FEMALES				
1987	24.4	40.2	73.5	68.1	9.5	51.6	142.8
1988	24.2	46.9	73.2	66.2	9.5	52.1	146.4
1989	26.6	54.0	77.0	67.4	9.6	52.8	160.0
1990	25.8	51.2	82.1	71.3	10.0	55.5	162.3
1991	25.8	52.8	87.7	71.0	10.2	57.0	167.4
1992	23.4	44.4	80.3	67.7	9.4	54.7	148.8
			PERSONS				
1987	97.2	87.3	116.5	176.5	36.2	107.5	325.6
1988	97.4	100.6	115.4	179.2	35.4	107.1	341.7
1989	103.2	110.7	118.0	181.0	33.0	108.1	363.6
1990	101.9	104.5	126.8	186.3	32.8	111.5	366.6
1991	98.4	104.5	133.3	182.3	30.8	111.8	367.4
1992	91.0	95.9	124.6	169.7	28.7	107.8	335.4

Unemployment

Labour force surveys

For the purpose of the survey, unemployed persons are those aged 15 years and over who were not employed during the survey week and:

(a) had actively looked for full–time or part–time work at any time in the four weeks up to the end of the survey week and;

(i) were available for work in the survey week, or would have been available except for temporary illness (*i.e.* lasting for less than four weeks to the end of the survey week); or

(ii) were waiting to start a new job within four weeks from the end of the survey week and would have started in the survey week if the job had been available then; or

(b) were waiting to be called back to a full–time or part–time job from which they had been stood down without pay for less than four weeks up to the end of the survey week (including the whole of the survey week) for reasons other than bad weather or plant breakdown.

Unemployed Persons

May	Looking for full–time work: Aged 15–19 years	Looking for full–time work: Aged 20 years and over	Looking for full–time work: Total	Looking for part–time work	Total
	NUMBER ('000)				
1988	10.4	38.2	48.6	9.4	58.0
1989	8.3	37.6	45.9	9.1	55.0
1990	8.8	33.0	41.9	9.9	51.8
1991	9.3	49.9	59.2	9.9	69.1
1992	12.9	64.8	77.7	10.4	88.1
1993	9.7	53.6	63.3	12.4	75.7
	UNEMPLOYMENT RATE (per cent) *(a)*				
1988	22.5	8.0	9.2	6.2	8.6
1989	17.3	7.6	8.4	5.7	7.8
1990	21.3	6.5	7.6	6.0	7.2
1991	27.5	9.7	10.8	5.5	9.5
1992	45.0	12.5	14.2	5.8	12.2
1993	35.1	10.4	11.6	6.8	10.4

(a) The unemployment rate for any group is the number unemployed expressed as a percentage of the labour force (*i.e.* employed plus unemployed) in the same group.

Further details may be obtained from the following bulletins: *The Labour Force, Australia, Preliminary* (6202.0); *The Labour Force, Australia* (6203.0). In addition, *Labour Force, South Australia* (6201.4) contains detailed figures for South Australia.

Job vacancies

Estimates of the number of job vacancies are derived from quarterly sample surveys of employers conducted by telephone.

Job Vacancies

May	Manufacturing (a)	Other industries (b)	Total vacancies	Job vacancy rate
	'000	'000	'000	per cent
1988	(c)0.8	(c)2.3	(c)3.1	2.7
1989	(c)1.6	1.9	3.5	0.7
1990	0.8	(c)2.6	(c)3.4	(c)0.7
1991	(c)0.6	(c)0.8	(c)1.5	(c)0.3
1992	(c)0.5	(c)0.9	1.4	0.3
1993	(c)0.5	(c)1.3	(c)1.8	(c)0.4

(a) Australian Standard Industrial Classification (ASIC) Division C. *(b)* ASIC Division A–L excluding Division C (Manufacturing), Subdivision 01, 02 (Agriculture etc.), 94 (Private Households Employing Staff) and defence forces. *(c)* Subject to sampling variability too high for most practical uses.

Employment services

The Commonwealth Employment Service (CES), administered by the Department of Employment, Education and Training (DEET), assists people seeking employment to obtain positions best suited to their training, experience, abilities and qualifications and assists employers seeking labour to obtain employees best suited to the demands of the employers' particular class of work. The DEET has a wide range of labour market and training programs which have been developed to meet these objectives.

The State Government is also involved directly in employment and training programs designed to alleviate unemployment. The Special Employment Initiatives Unit of the Office of Employment and Training is responsible for developing and administering these schemes. There are also a number of private employment agencies, all of which are required to register with the Department of Labour.

7.2 INDUSTRIAL RELATIONS

In Australia a unique system of conciliation and arbitration by Government tribunals has been developed, with the Commonwealth and the State Parliaments each passing their own industrial legislation.

Under Section 51 of the Constitution, the Commonwealth Parliament may make laws in relation to 'conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State'. The *Industrial Relations Act 1988* (Cwlth) is binding only on the parties to a dispute and decisions need not be of general application to an industry.

Employees not specifically covered by Federal awards are subject to State industrial jurisdiction, but where an award or determination of a State industrial tribunal is inconsistent with an award of a Federal tribunal the latter prevails to the extent of the inconsistency.

Industrial tribunals

The Australian Industrial Relations Commission makes determinations on standard hours, national wage cases, equal pay principles, leave and wages.

The South Australian legislation governing State intervention in industrial relations is the *Industrial Relations Act (South Australia) 1972* which provides for an Industrial Court, an Industrial Commission and Conciliation Committees.

Employer or employee associations may apply for registration which confers a legal corporate status and allows ready access to the Commission.

Further details regarding State industrial tribunals may be found in the annual report of the Industrial Court and Commission.

Employee associations

At 30 June 1992 there were 95 separate unions with a total membership of 297,200 operating in South Australia. Although a number of unions exist only in this State, branches of interstate or federated unions account for the majority of total membership. The central labour organisation for the State is the United Trades and Labor Council of South Australia, founded in 1884.

Trade Unions

At 30 June	Members			Proportion of members to total employees		
	Males	Females	Persons	Males	Females	Persons
	'000	'000	'000	per cent	per cent	per cent
1987	184.3	86.6	270.9	66	41	55
1988	183.9	95.3	279.2	63	41	55
1989	187.3	110.6	297.9	63	48	57
1990	189.4	114.8	304.3	63	49	57
1991	186.8	119.2	306.0	64	50	58
1992	176.8	120.4	297.2	64	55	60

Further details are contained in the bulletin *Trade Union Statistics, Australia* (6323.0).

Employer associations

At the end of December 1992 there were 18 associations of employers registered with the South Australian Industrial Court and Commission. In industrial matters four are dominant:

(a) the Chamber of Commerce and Industry (SA) Inc. has individual members who subscribe directly to the Chamber for the industrial and other services provided. Where appropriate, members are grouped into trade associations. The Chamber's industrial advocates represent members in the making and variation of awards, and assist members in the settlement of disputes. The Chamber monitors Bills presented to the Parliaments and, where appropriate, makes representations on behalf of its members seeking amendments to legislation;

(b) the Engineering Employers Association, South Australia, represents the varied interests of the State's metal and engineering industry in all facets of industrial relations, education and training (including a group apprenticeship scheme), trade, economic and legislative matters;

(c) the Motor Trade Association of SA Inc. is an industrial organisation aimed at representing the interests of employers in the motor industry, both in the retail sector and in the distribution and manufacturing sectors; and

(d) the South Australian Employers' Federation Inc. is an industrial relations oriented employer body which provides advice and representation to employers engaged in all facets of South Australian industry.

Industrial disputes

Estimates of industrial disputes are compiled from data obtained from employers, trade unions and government authorities. The statistics relate only to disputes involving stoppages of work of ten work days or more at the establishments where the stoppages occurred. Effects on other establishments because of lack of materials are excluded.

Industrial Disputes

Year ended 31 December	Disputes	Workers involved	Working days lost	
			Total	Per thousand employees
	No.	'000	'000	No.
1987	102	41.4	44.6	91
1988	87	39.9	47.0	93
1989	68	37.4	35.0	67
1990	53	73.8	125.8	236
1991	67	34.9	59.3	112
1992	32	23.2	12.2	25

Particulars of all disputes in progress during the year are included in the annual figures. Consequently, details of the number of disputes and of workers involved in the disputes which commenced in any year, and were still in progress during the following year are included in the figures for both years. Working days lost are included in the appropriate year. Workers involved in more than one dispute during the year are counted once for each dispute. Workers laid off at the establishment where the stoppages occurred, but who are not themselves parties to the dispute, are included.

Prior to 1984 estimates of working days lost per thousand employees were calculated using estimates of employees from the Labour Force Survey excluding those employed in agriculture and in private households. From 1984 estimates of employees from the Survey of Employment and Earnings, combined with estimates of employees in agriculture and in private households obtained from the Labour Force Survey, have been used to derive the denominator. Because of difficulties in identifying all participants in each dispute the statistics should be regarded as giving only a broad measure of the extent of work stoppages.

7.3 WAGES, HOURS AND LABOUR COSTS

Wages

The Industrial Commission of South Australia has for many years granted flow–ons of the National determination to State awards, largely using the Australian Industrial Relations Commission guidelines but with special provisions to allow for South Australian situations. Some details for recent years may be found in the annual report of the Industrial Court and Commission of South Australia and for earlier years on pages 302–3 of the *South Australian Year Book 1984*.

Award rates of pay indexes are produced for full–time adult wage and salary earners whose minimum rates of pay are normally varied in accordance with awards, determinations and collective agreements. The indexes are constructed for males and females separately and are based on minimum weekly and hourly award rates. They measure only the relative trends in award rates and have a base of 100.0 at June 1985. Thus they do not reflect any subsequent effects of compositional changes in the labour force or in industry structure. Excluded from the indexes are serving members of the defence forces, employees in agriculture, forestry, fishing and hunting and in private households.

Index of Weekly Award Rates of Pay : Full–time Adult Employees, Industry
(Base of Index: June 1985 = 100.0)

Industry	*April 1992*	*April 1993*
MALES		
Mining	135.3	136.3
Manufacturing:	142.6	143.6
Food, beverages and tobacco	143.5	145.4
Metal products, machinery and equipment	140.7	141.4
Transport equipment	137.5	137.5
Other manufacturing *(a)*	145.8	147.2
Construction	137.5	139.3
Wholesale trade	142.4	144.1
Retail trade	144.4	149.8
Finance, property and business services	136.8	137.8
Community services	139.2	139.7
All industries *(b)*	139.8	141.0
FEMALES		
Manufacturing:	142.6	144.0
Food, beverages and tobacco	137.6	138.5
Metal products, machinery and equipment	144.3	146.2
Other manufacturing	144.5	146.1
Wholesale trade	142.2	146.6
Retail trade	141.8	145.8
Finance, property and business services	138.6	142.2
Community services	142.6	143.0
All industries *(b)*	141.4	143.3

(a) Includes wood, wood products and furniture, non–metallic mineral products and miscellaneous manufacturing. *(b)* Excludes employees in agriculture, forestry, fishing and hunting and in private households.

Earnings

Various measures of earnings of employees are available, the principal of which is the quarterly average weekly earnings series. A sample survey of employers collects information on earnings in respect of a specified pay week generally at or about the middle of each quarter. Data are sought at a finer level of disaggregation in each December quarter survey. Average weekly ordinary time earnings refers to one week's earnings attributable to award, standard or agreed hours of work. It is calculated before taxation and other deductions and includes over–award and penalty pay, shift and other allowances, commissions and retainers and other payments such as bonuses.

Average Weekly Earnings of Employees
(Dollars)

	Males			*Females*		
	Full–time adults			*Full–time adults*		
Period	*Ordinary time*	*Total*	*All males*	*Ordinary time*	*Total*	*All females*
November 1991	587.10	626.00	565.90	519.80	531.20	381.90
February 1992	592.70	632.60	574.90	537.30	546.40	401.10
May	604.10	637.40	575.50	529.00	538.80	395.30
August	609.80	644.40	567.70	529.70	542.30	386.30
November	610.30	647.60	547.10	532.80	543.90	377.00
February 1993	610.10	648.50	559.50	533.30	543.90	381.60

Weekly total earnings is weekly ordinary time earnings plus weekly overtime earnings. Changes in the average may be affected by changes in the level of earnings of employees and also by changes in the composition of the labour force, such as variations in the proportion of part–time or junior employees and in the occupational distribution.

A second measure of average weekly earnings is obtained from the employer based Survey of Employee Earnings and Hours which has been conducted in May of each year since 1974, except in 1982 and 1984.

Distribution of Average Weekly Earnings of Employees

	Males			*Females*		
Weekly earnings	*May 1990*	*May 1991*	*May 1992*	*May 1990*	*May 1991*	*May 1992*
	PER CENT					
Under $140	4.5	4.7	6.6	15.4	13.4	14.7
$140 and under $220	3.6	2.8	2.3	9.6	9.7	9.6
$220 and under $300	5.4	3.4	2.9	13.9	14.9	10.8
$300 and under $380	10.8	8.6	6.7	19.4	15.4	13.9
$380 and under $460	19.7	19.4	18.2	19.5	19.1	19.6
$460 and under $540	15.9	14.9	17.0	8.7	9.2	11.1
$540 and under $620	11.7	12.6	13.2	6.0	6.5	6.8
$620 and under $700	10.2	10.4	8.6	4.0	4.6	3.9
$700 and over	18.1	23.2	24.4	3.6	7.4	9.6
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
	DOLLARS					
Median weekly earnings	489.90	516.00	516.20	346.40	365.00	384.40
Mean weekly earnings	516.90	553.50	556.00	344.90	371.20	383.50

For details of the standard errors involved and for more information on the survey, *see Distribution and Composition of Earnings and Hours of Employees, Australia* (6306.0).

The survey provides a measure of the size of and movements in the various components of earnings (*i.e.* award and over–award pay, overtime pay and payment by measured result) and in earnings by occupation. It also produces median earnings (the level where half of recipients receive less and half receive more) for many different groupings of employees as well as data on average hourly earnings and a distribution of employees by levels of earnings.

A third source of data on average weekly earnings of employed wage and salary earners is an annual household based survey conducted each August in conjunction with the labour force survey.

It is also a second source of a distribution of earnings, distributions by variables such as age and industry being available. However, weekly earnings refer to the amount of 'last total pay' (or weekly equivalent) prior to the interview with no adjustment being made for any back pay or prepayment. For more information, *see Weekly Earnings of Employees (Distribution), Australia* (6310.0).

Hours of work

The following table shows the relative distribution of employed civilian wage and salary earners in South Australia according to the number of hours worked in a specified week, as recorded in the August labour force surveys.

The distribution is based on actual hours worked in all jobs including overtime, rather than hours paid for, and is therefore affected by public holidays, leave, absenteeism, temporary absence from work because of sickness, accident and industrial disputes, and work stoppages caused by plant breakdowns and weather.

Employed Wage and Salary Earners : Hours Worked[(a)]

	Percentage who worked the following hours in the specified week							
May	*0*	*1–29*	*30–34*	*35–39*	*40*	*41–48*	*49 and over*	*Total*
1988	5.7	20.8	7.4	23.2	17.4	13.6	11.9	100.0
1989	5.1	20.6	7.9	22.6	17.9	13.8	12.0	100.0
1990	4.8	22.3	7.2	24.0	15.4	13.8	12.5	100.0
1991	5.3	24.2	7.6	20.8	15.6	13.3	13.2	100.0
1992	4.3	25.3	7.5	18.6	14.6	11.6	18.1	100.0
1993	4.3	23.9	8.2	18.6	14.0	11.5	19.6	100.0

(a) Employed civilian population, fifteen years of age and over.

Overtime

Information about overtime hours worked is obtained from a quarterly sample survey of employers. For the purposes of the survey, 'overtime' is time worked in excess of award, standard or agreed hours of work for which payment is received. Excluded is any overtime for which employees would not receive payment, *e.g.* unpaid overtime worked by managers, normal shiftwork and standard hours paid at penalty rates. Overtime hours represent the number of hours of overtime paid for.

Overtime

	Average weekly overtime hours				*Percentage of employees in the survey working overtime*	
	Per employee in the survey		*Per employee working overtime*			
May	*Hours*	*Standard error*	*Hours*	*Standard error*	*Per cent*	*Standard error*
1988	0.99	0.06	6.57	0.24	15.02	0.72
1989	1.12	0.06	6.83	0.20	16.45	0.74
1990	1.24	0.09	6.83	0.40	18.10	1.08
1991	0.99	0.12	6.50	0.57	15.19	1.05
1992	0.87	0.10	5.63	0.22	15.40	1.50
1993	0.96	0.07	5.65	0.24	16.92	1.06

For information to May 1989 *see Overtime, Australia* (6330.0). From August 1989 information is contained in *Job Vacancies and Overtime, Australia* (6354.0).

Labour costs

A comprehensive Survey of Labour Costs was conducted by the ABS. The two–part survey of employers measured costs incurred by employers in employing labour and amounts paid for time not worked as well as those paid for time

worked. One part of the survey measured 'wage costs' dissected into payments for time worked and payments for time not worked. Included were details of annual leave, sick leave, long service leave, infrequent bonuses, public holidays and total hours paid for. The other part of the survey measured the 'labour costs' to employers of gross wages and salaries, payroll tax, workers' compensation payments, contributions for superannuation and fringe benefits tax. This survey has been conducted annually and results are shown below.

Major Labour Costs

	1989–90		1990–91	
Type of cost	*Private*	*Public*	*Private*	*Public*
AVERAGE COSTS PER EMPLOYEE (Dollars)				
Earnings	21,166	27,063	22,585	28,921
Other labour costs:	2,308	4,218	2,776	4,660
Superannuation	785	2,632	919	2,782
Payroll tax	722	865	870	1,070
Workers compensation	675	624	831	701
Fringe benefits tax	125	96	157	106
Labour costs	*23,475*	*31,281*	*25,361*	*33,582*
AS A PERCENTAGE OF TOTAL LABOUR COSTS				
Earnings	90.2	86.5	89.1	86.1
Other labour costs:	9.8	13.5	10.9	13.9
Superannuation	3.3	8.4	3.6	8.3
Payroll tax	3.1	2.8	3.4	3.2
Workers compensation	2.9	2.0	3.3	2.1
Fringe benefits tax	0.5	0.3	0.6	0.3
Labour costs	*100.0*	*100.0*	*100.0*	*100.0*

Superannuation Costs *(a)*

	1989–90		1990–91	
Particulars	*Private*	*Public*	*Private*	*Public*
Cost per employee covered ($)	1,304	2,735	1,307	2,841
Percentage of employees covered	60.2	96.3	70.3	97.9

(a) For further information *see Labour Costs, Australia* (6348.0).
Note: Public and private sector superannuation costs are not directly comparable because these sectors meet their superannuation liabilities in different ways.

Holidays and leave

Public holidays

A number of days are observed each year throughout the State as public holidays and additional days may be proclaimed either on a State–wide basis or applicable to particular localities. Authorised public holidays are:

New Year's Day (1 January or the following Monday if that day falls on a Saturday or Sunday),
Australia Day (first Monday after 25 January),
Good Friday,
Easter Saturday,
Easter Monday,

Anzac Day (25 April or the following Monday if 25 falls on a Sunday),
Adelaide Cup Day (third Monday in May),
Queen's Birthday (second Monday in June),
Labour Day (first Monday in October),
Christmas Day (25 December or the following Monday if 25 falls on a Saturday or Sunday), and
Proclamation Day (28 December or the following Monday if 28 falls on a Saturday or Sunday).

Annual leave

Under Federal awards generally, four weeks paid annual leave is granted to employees who have completed twelve months continuous service. Under State awards the Commonwealth standard of four weeks annual leave has generally been adopted. Certain employees in special occupations or where regular shift work is involved *e.g.* police officers, nurses etc. are entitled to annual leave in excess of four weeks. In 1973 the South Australian Industrial Commission handed down a decision which enabled part–time workers, when taking annual leave, to be paid the normal weekly wage that they would have received had they been at work.

Payment in lieu of annual leave or proportionate leave on termination of employment must be made to all employees, whether subject to an award or not, irrespective of the reason for, or manner of, termination of the employment.

Sick leave

The *Industrial Relations (South Australia) Act 1972* provides that all full–time employees whether bound by an award or not shall be eligible to receive annually not less than ten days cumulative sick leave on full pay. The Act was amended from February 1982 to enable employees to take sick leave, when ill for more than three consecutive days during annual leave. Most Federal awards provide for two weeks sick leave a year.

Long service leave

The South Australian *Long Service Leave Act 1967* entitles employees in respect of continuous service after 1 January 1972 to thirteen weeks leave for each ten years service. The obligation to grant leave is imposed on all employers in South Australia although the Industrial Commission has the power to exempt an employer where the employees involved have access to benefits not less favourable than those prescribed by the Act.

Entitlement to long service leave also applies to casual employees provided that the service with the employer is continuous within the meaning of the Long Service Leave Act.

State and local government employees are in general entitled to ninety calendar days leave after ten years service. However, from 1 July 1975, State public servants with over fifteen years continuous service accumulate long service leave at the rate of fifteen days leave per year for each year of service after the fifteenth. Commonwealth Government employees are entitled to three months after ten years of service, while those covered by other Federal awards or agreements generally receive at least 13 weeks leave after 15 years of service.

The various long service leave arrangements provide for additional *pro rata* periods of leave for service in excess of the minimum, and for *pro rata* payments for employees who have completed a specified term of service but who, through the termination of their services or through death, do not complete the full entitlement period.

Maternity leave

Maternity leave provisions are inserted in most South Australian awards. The South Australian provisions are based on those granted in March 1979 by the Australian Conciliation and Arbitration Commission for Federal awards. The provisions allow full–time or part–time employees with not less than twelve months continuous service, to take a minimum of six weeks or a maximum of fifty–two weeks maternity leave without pay. Seasonal and casual workers are not eligible.

Chapter 8

LAND SETTLEMENT AND DEVELOPMENT

8.1 LAND TENURE

Identification of land

To facilitate the identification of land, the southern portion of the State encompassing all the arable land and certain pastoral areas has been subdivided into counties and these in turn have been generally subdivided into smaller units known as hundreds.

There are currently forty–nine counties (covering 23 per cent of the State), the last of these being declared in 1933. The counties have an average size of 463,000 hectares, varying from County Light, north of Adelaide, with 217,470 hectares to County Jervois on Eyre Peninsula with 959,000 hectares.

Counties are generally subdivided into hundreds, although four northern counties remain undivided and a number of others are only partly subdivided. There is considerable variation in the size of hundreds, while the number of hundreds in a completely subdivided county varies from eight in Counties Alfred and Kintore to thirty–four in County Jervois. New hundreds are created occasionally, the present total being 536. Hundreds are further subdivided into sections which in turn may be divided into allotments or occasionally blocks.

For the purposes of title, land is identified by the county, hundred, and section, and, where appropriate, block or allotment within which it falls. However, with the introduction of this State's computerised Land Ownership and Tenure System (LOTS) this method has been gradually replaced by a system of unique land parcel numbers identified on survey plans lodged in the Land Titles Office.

Torrens System of land registration

Land transactions in South Australia are conducted under the Torrens System of land registration as provided by the *Real Property Act 1886*. This system, first introduced by the *Real Property Act 1858*, was named after its author, Sir Robert Torrens, who was at that time Registrar–General of the Colony.

The Torrens System provides that the matter of title to land shall be a government responsibility. Each piece of land is represented by a certificate of title which, with very few (and in practice unimportant) exceptions, is guaranteed by the State. Retrospective examination which is necessary with general law title is eliminated and the costs and time involved in conveyancing can thus be kept to a minimum.

Legislation passed in 1990 authorised the conversion of the Torrens Register to a computer–based system. Conversion is expected to be completed in 1997.

An amendment to the Real Property Act provided for the creation of interests in land by a three–dimensional division of the land into strata units by means of strata plans. The *Strata Titles Act 1988* has repealed and replaced this provision.

The new Act maintains the strata concept and introduced reforms towards its enahncement. A strata plan creates individual private rights (as well as common entitlements in the property depicted in the plan).

An amendment to the Strata Title Act in 1992 provides a resolution of disputes mechanism by way of inexpensive application to the Small Claims Division of the Local Court. The Local Court has power to refer any matter to a higher court if deemed necessary.

Land administration

Approximately fifty–nine per cent of the State comprises Crown Tenures controlled by the Department of Lands. The other forty–one per cent is freehold, national park or Aboriginal reserve.

There is very limited allocation of Crown land to private individuals and this is usually arranged by competitive process including auctions. This land can be allocated to private individuals either as a separate lease (pastoral or miscellaneous), freehold or added to an existing perpetual lease. Sale of freehold from the Crown is for cash or by Agreement to Purchase.

Pastoral land is held under forty–two year leases which may be extended after fourteen years to a maximum of forty–two years dependent on good land management. Rent is based on fair market rent for the stock levels carried.

Perpetual leases cover approximately 7.5 per cent of the State. No new lands are released in this tenure. In the safe agricultural areas these leases may be converted to freehold.

Land used for public purposes is dedicated as a reserve for a particular purpose and allocated to an agency or group for their control. This includes national parks, forest and Aboriginal reserves.

Aboriginal freehold land has been granted to the Pitjantjatjara and Maralinga peoples. This freehold is inalienable from the Aboriginal people.

Current tenure

In the table below, land in South Australia is classified according to its present form of tenure. Land sold, dedicated and under agreement to purchase does not represent the accumulated total of all alienated lands as certain alienated lands repurchased by the Crown are currently held under leases.

Land and Reserves Tenure, 30 June 1991

Particulars	*Area*	*Proportion*
	hectares	*per cent*
Lands sold and dedicated	26,067,946	26.48
Lands held under agreement to purchase	49,231	0.05
Lands held under lease	48,893,125	49.67
Fresh water lakes	90,973	0.09
Salt water lakes and lagoons	3,107,986	3.16
National parks	13,102,133	13.31
Flinders Chase	55,685	0.06
Aboriginal reserves	778,992	0.79
Unleased vacant lands etc.	6,291,707	6.39
Total area of South Australia	*98,437,778*	*100.00*

In 1901 the area sold, dedicated and held under lease and agreement to purchase, *i.e.* the area occupied, was 37,934,751 hectares, increasing to 57,472,548 in 1924, but falling to 52,370,744 in 1931 because of decreased areas under pastoral lease.

8.2 TOWN AND REGIONAL PLANNING

Planning

The majority of South Australians live in an urban environment – either in Adelaide or in country towns. The quality of this environment is affected by competing pressures for commercial development, new housing, industry, transport, recreational facilities and conservation of our resources. Careful planning is needed to meet the changing needs of the community in a way that facilitates development and maintains quality of life.

Planning and development assessment are the responsibilities of the Department of Housing and Urban Development, which was established in 1993 as part of the State Government's restructuring process. In working towards its objectives, the Office of Planning and Urban Development within the department manages a wide range of strategic planning and structure planning projects, and provides general planning and environmental advice on major initiatives.

The laws and regulations on planning and development were overhauled in 1993 to improve the planning system and make it easier for all to use. These changes were the outcome of the Planning Review which was established in 1990 to review the planning system. The review involved a three year process of consultation and attracted contributions from a wide range of South Australians.

The integrated planning system will commence operation towards the end of October 1993, when the *Development Act 1993* replaces the *Planning Act 1982*, as well as a number of other Acts. This new system involves a new approach to planning – one which is forward looking rather than reactive and geared largely to complex land use controls.

Strategic planning is at the core of integrated planning system. This means there is a 'whole of government' approach, where all of the Stage Government's interests in development are directed at common goals expressed in the Planning Strategy – the policy document that sets out the range of social, economic and environmental issues which form the overall vision for the future of the State. The Planning Strategy, together with the Development Plans, provides the framework for development assessment against which applications are evaluated.

The Department of Housing and Urban Development contributes to the strategic planning process by producing a metropolitan development program which assesses likely growth patterns for the coming five years. This program forms the basis for the staged release of land for urban development. In metropolitan Adelaide emphasis will continue to be placed on urban consolidation and medium density housing.

The Development Act is the major piece of legislation governing the preparation of Development Plans and the development assessment process in South Australia. Under the Act, councils are responsible for development policies and most assessment decisions. These decisions by councils are guided by the policies set out in Development Plans – statutory documents based on each council area prepared by local government in consultation with the community. Local councils consider development proposals and can amend or add to Development Plan policies relating to their areas. This process involves extensive public consultation and if approved leads to the authorisation of amendments referred to as plan amendment reports.

Certain development proposals are of major social, economic or environmental importance. In these instances the Minister of Housing and Urban Development can require an Environmental Impact Statement to ensure that all of the effects of proposed developments are fully considered. This process involves the preparation of a draft environmental impact statement by the proposer of the development, evaluation by an assessment team, and public consultation.

Heritage

Planning also involves protecting the fabric of South Australia's history. Heritage is reflected in buildings and places where activities and historic events took place – city buildings, churches, workers' cottages, geological monuments and mining towns to name a few. Various landscapes and trees also provide important reminders of the State's natural history.

The State Government has a program to conserve the State's non–Aboriginal heritage. This is achieved primarily through the *South Australian Heritage Act 1978* and is managed by the State Heritage Branch, Department of Environment and Planning. A register of significant heritage properties known as the Register of State Heritage Items has been set up to protect important sites and places. One hundred and thirty–nine items were entered on the Register during 1991–92 and a further 129 items were placed on the Interim List of State Heritage Items.

Owners of heritage properties are required to seek approval from their local councils for any changes they wish to make to items on the Register. During 1991–92, 104 applications for development of heritage items were processed.

A State Heritage Fund has been set up to encourage the conservation of heritage properties by providing loans and grants to owners of registered properties. The Department provides them with technical advice about various ways of conserving and adapting old buildings. An extensive series of Heritage Conservation Practice Notes has been produced to give practical information on a wide range of heritage related issues.

The conservation and restoration of shipwrecks is also encouraged under the *Historic Shipwrecks Act 1981*.

8.3 WATER SUPPLY AND SEWERAGE

Water supply

The *Waterworks Act 1932* gives the Minister of Water Resources the power to divert and impound water from any source for the purpose of supplying water to any part of the State.

This power is now curtailed by the *Water Resources Act 1990*, which provides for the control and management of water resources.

The Minister is empowered under this Act to construct, maintain and operate the infrastructure necessary to deliver water to consumers and to charge a rate for this service.

The *Water Resources Act 1990* provides for the management of the water resources of the State by the Minister of Water Resources to preserve water quality and to provide for the sharing of available water on a fair basis.

Its provisions include the establishment of a South Australian Water Resources Council, Water Resources Committees, the Water Resources Appeal Tribunal and Water Well Drilling Committee. Ten Regional Water Resources Committees: River Murray, Northern Adelaide Plains, Arid Areas, North Para, Angas–Bremer, Lower South East, Southern Vales, Upper South East, Mallee and Eyre Regions have been established.

The aggregate storage capacity at 30 June 1993 for Adelaide Metropolitan reservoirs was 195,540 megalitres and 32,678 megalitres for country reservoirs.

It should be noted that storage includes service reservoirs and that both natural intake and River Murray water are stored in Northern and Metropolitan reservoirs. The total length of water mains at 30 June 1993 was 24,118 kilometres.

The *Water Conservation Act 1936* provides for the control of small reservoirs, bores, tanks etc. established in certain remote areas as emergency water supplies or to assist local development.

Water filtration

Adelaide's first water filtration plant at Hope Valley began supplying filtered water to the Metropolitan Distribution System in November 1977. Since then, plants have been commissioned at Anstey Hill, Barossa, Little Para and Happy Valley. The sixth and final plant to serve Metropolitan Adelaide, at Myponga, is due for completion at the end of 1993. A plant at Morgan serves the mid–North and Yorke Peninsula.

Distribution of water resources

Drainage systems

In agreement with the States, the Australian Water Resources Council has divided Australia into twelve surface water drainage divisions. The divisions which constitute major surface water resources for South Australia are the South Australian Gulf Drainage Division, which lies wholly within the State and in which are located all important State reservoirs, and the Murray–Darling Division, of which only a part is located in South Australia, and the waters of which are allocated between this State, Victoria, and New South Wales in accordance with the terms of the Murray–Darling Basin Agreement (*see* Part 8.4 Irrigation and Drainage).

Part of the large Lake Eyre Drainage Division covers the northern and eastern areas of the State, but, although streams in the area may flood extensively on occasions, they are generally unreliable and significant only to the local pastoral

industry. The section of the South–East Coast Drainage Division which intrudes into the south–east corner of South Australia has no good dam sites but a high rainfall in the area provides a good underground water resource of considerable importance to the State. Underground resources on the seaward edge of the Western Plateau Division, which covers the south–western part of the State, are recharged also from local rainfall.

South Australian Gulf Drainage Division

The eastern boundary of this Division is formed partly by the Mount Lofty Ranges, which rise to a maximum of 727 metres east of Adelaide and to over 1,000 metres north of Burra, and further north it follows the Flinders Ranges which reach a height of 1,168 metres at St Mary Peak. The boundary then rounds Lake Torrens and, further south, the western boundary is formed by a discontinuous line of hills on Eyre Peninsula. Kangaroo Island is also included, so that in all, the Division covers the whole perimeter of the South Australian gulfs. The individual river basins in this Division are all very small. Most of the South Australian reservoirs are situated in this Division.

Major Reservoirs, 30 June 1993

Reservoir	*Capacity*	*Area at full supply level*	*Catchment area*
	megalitres	*hectares*	*km^2*
South Para	44,800	400	221
Mount Bold	45,900	308	388
Myponga	26,800	280	124
Little Para Dam	20,800	150	82
Kangaroo Creek	19,000	104	290
Millbrook	16,500	178	*(a)*
Happy Valley	12,700	188	*(a)*
Tod River	11,300	134	*(a)*
Bundaleer	6,370	80	*(a)*
Baroota	6,120	63	129
Warren	4,770	105	*(a)*
Barossa	4,510	62	*(a)*
Hope Valley	3,470	60	*(a)*

(a) Offstream reservoir. Water is largely diverted from other catchments.

Rainfall in excess of 750 millimetres a year occurs only on a very small area in the Mount Lofty Ranges, while in the north–west of the Division the annual average is less than 150 millimetres. In the southern parts of the Division, average precipitation generally exceeds potential evaporation only from May to August, and over most of the Division monthly evaporation rates exceed rainfall throughout the year.

After the major dam sites in the Mount Lofty Ranges had been developed, because of the small size of the individual catchments in the Division and the relatively low run–off and its high variability, it was found more economical to provide additional water to Adelaide and other high demand centres *via* pipelines from the River Murray. No further reservoirs or major pipelines for metropolitan Adelaide will need to be built this century. When augmentation of the water supply system is necessary in the first part of the next century it is likely that the supply source will be the River Murray, possibly by way of another pipeline plus a new reservoir in the Mount Lofty Ranges to act as a balancing storage for River Murray water.

The present average annual extraction of water by the Engineering and Water Supply Department from the Gulf Drainage Division is about 138,000 megalitres from surface and groundwater; private diversion may take a further 98,000 megalitres.

River Murray

The River Murray is the most important source of water supply for South Australia. Under the terms of the *Murray–Darling Basin Act 1983* (*see* Part 8.4 Irrigation and Drainage), South Australia is entitled to 1,850,000 megalitres of water annually, subject to the declaration of restriction by the Murray–Darling Basin Commission. Losses by evaporation and seepage account for about 800,000 megalitres per annum. In recent years, irrigation diversions have averaged 480,000 megalitres per annum and town, domestic, industrial and stock supplies have averaged 110,000 megalitres per annum.

Adelaide metropolitan water supplies are supplemented by River Murray water through the Mannum–Adelaide (67 kilometres) and Murray Bridge–Onkaparinga (48 kilometres) pipelines.

The Morgan–Whyalla (359 kilometres), Swan Reach–Stockwell (53 kilometres) and Tailem Bend–Keith (143 kilometres) pipelines provide the water supply for extensive country areas or augment local resources in these areas.

Metropolitan water supply

In the following table, details of metropolitan services as well as revenue and expenditure are given for the metropolitan water supply district for the last three years.

Adelaide Metropolitan Waterworks[(a)]

Particulars	*1990–91*	*1991–92*	*1992–93*
Length of mains (kilometres)	8,329	8,464	8,543
Number of services	378,188	384,610	391,080
		$'000	
Revenue:			
Rates and other services	163,153	160,485	146,019
Expenditure:			
Working expenses and depreciation	80,367	87,288	90,139
Interest	48,619	47,122	40,317
Total	*128,986*	*134,410*	*130,456*
Surplus	34,167	26,075	15,563

(a) Includes particulars relating to near country areas supplied by extensions of the Metropolitan distribution system.

Water consumption

The following table gives details of water used during the year and storage capacity of major reservoirs at the end of the year for metropolitan and country districts for the last three years. The quantity of water pumped from the River Murray through the major pipelines is also shown.

Water Storage and Consumption
(Megalitres)

Particulars	*1990–91*	*1991–92*	*1992–93*
Capacity of major storages (at end of year):			
Adelaide metropolitan water supply *(a)*	202,040	202,040	195,540
Country water supply	32,678	32,678	32,678
Water consumption:			
Adelaide metropolitan water supply *(b)*	187,000	167,000	150,000
Country water supply *(c)*	86,000	74,000	65,000
Pumped from River Murray:			
Mannum–Adelaide Pipeline	55,100	48,600	8,500
Murray Bridge–Onkaparinga Pipeline	40,000	23,400	8,000
Morgan–Whyalla Pipeline	26,700	25,600	22,000
Other supply systems	15,700	15,100	19,500

(a) Includes storages on the Mannum–Adelaide and Murray Bridge–Onkaparinga Pipelines.
(b) Consumption within the Adelaide Statistical Division.
(c) Includes consumption in various areas outside of the Adelaide Statistical Division supplied from the Metropolitan distribution system.

Other water resources

Underground basins, augmented to a small degree by water pumped from the River Tod, provide most of the water supply on Eyre Peninsula. In contrast, the South East is well endowed with natural spring waters. The Blue Lake provides about 3,078 megalitres annually to Mount Gambier. There are also considerable underground water resources in the region.

Many other areas of the State are dependent on underground supplies, particularly for stock drinking water. The aquifers of the Northern Adelaide Plains provide the major source of water for market gardens and related irrigation, but the demand level has been found to be beyond the permanent capability of the area and usage is subject to controls by a licensing system and metering of wells.

Sewerage

Sewerage of cities and towns in South Australia is undertaken by the State Government under the authority of the *Sewerage Act 1929*. The Act is administered by the Engineering and Water Supply Department for the Minister of Water Resources and provides for water borne sanitary sewerage schemes within proclaimed drainage areas. It also empowers the Minister to determine and police the standard of private plumbing connected to the system as part of total sanitation. As a general rule Government sewerage schemes are provided only in densely populated cities and towns where they are essential for public health, or in areas where it is necessary to protect surface or underground water resources from pollution by domestic or industrial wastes.

Local government authorities are empowered under the *Local Government Act 1934* to provide sanitary drainage schemes and since 1962 these authorities have installed common effluent drainage schemes in 84 townships providing more than 40,000 connections throughout the State.

Metropolitan sewerage

Sewerage for Adelaide was first authorised by an Act of Parliament in 1878. Construction began in 1879 and by 1881 sewage from the city and inner suburbs was admitted to a sewage farm at Islington. Since then continual expansion of sewerage systems has kept pace with development of the metropolitan area as far as physical and financial factors permit and Adelaide is now the most completely sewered of the Australian capital cities.

Metropolitan Sewers

Particulars	*1990–91*	*1991–92*	*1992–93*
Adelaide drainage area (km^2)	714	722	722
Length of sewers (km)	5,909	6,015	6,078
Number of house drainage units connected	398,611	401,785	411,061
		$'000	
Revenue:			
Rates and other services	111,200	119,405	125,084
Expenditure:			
Working expenses	52,347	56,156	52,434
Interest	29,652	28,216	26,122
Total	*81,999*	*84,372*	*78,556*
Surplus	29,201	35,033	46,528

A large number of common effluent drainage systems have been installed in fringe areas by local government authorities and some of these have been, or are planned to be, connected to the sewerage systems. A charge for each house connected is levied against local government authorities whose common effluent drainage systems discharge to sewer mains. Property owners pay an annual rate for the service to the local government authority concerned.

Country sewerage

At 30 June 1992 the drainage areas of country sewerage schemes constructed and operated by the Engineering and Water Supply Department totalled 17,614.1 hectares; the length of sewers laid was 1,007 kilometres and the number of house drainage units connected totalled 47,922. Sewerage schemes are located at Aldinga, Angaston, Balhannah–Oakbank, Gumeracha, Hahndorf, Lobethal, Mannum, Millicent, Mount Gambier, Murray Bridge, Myponga, Naracoorte, Port Augusta, Port Lincoln, Port Pirie, Stirling, Victor Harbor, Whyalla, Woodside, Mount Burr and Nangwarry.

8.4 IRRIGATION AND DRAINAGE

Irrigation

Since 1978 the administrative authority for irrigation in irrigation areas has been the Engineering and Water Supply Department and the constructing authority is the Minister of Water Resources.

A more detailed historical discussion of irrigation in South Australia was included on pages 314–6 of the *South Australian Year Book 1970*.

Irrigation areas are confined almost exclusively to the Murray Valley and can be classified into two groups; highland areas requiring the pumping of water, and reclaimed lands watered by gravitation. During 1992–93, 394,000 megalitres of water were diverted from the River Murray in South Australia for irrigation purposes.

Highland areas

With the major exception of the Mypolonga Irrigation Area, highland irrigation is located in the hot and dry zone along the River Murray between Morgan and the Victorian border.

These areas are largely devoted to vineyards and citrus and stone fruit orchards which are irrigated by water pumped and distributed *via* open concrete–lined channels or low pressure piped mains. The Government is currently engaged in a major program of rehabilitating those areas still using channels, which are being replaced by sealed pipe mains and metered connections to each property in the Government irrigation areas.

Landholders on Government controlled areas and in private areas constituted under special Parliamentary Acts, pay an annual rate for irrigation and a charge is made for additional water, either on a measurement basis where meters have been installed, or on an hourly basis where channels are still utilised. The Renmark Irrigation Trust also supplies water on a volume basis to landholders in its district.

Irrigation systems must also provide for the removal of surplus water which accumulates beneath the surface of the land. Holdings have internal drainage systems leading to comprehensive drainage systems which convey the water to evaporation basins.

In 1991–92 there were 13,000 hectares of highland in Government–controlled areas and 2,000 hectares in non–government areas.

Reclaimed areas

On the Lower Murray between Mannum and Wellington, a series of swamp and overflow areas have been reclaimed by Government and private agencies. In 1991–92 there were 3,500 hectares of reclaimed land in Government–controlled areas and 2,000 hectares in non–government areas.

Murray–Darling Basin Agreement

The *River Murray Waters Act Amendment Act 1987*, ratified the Murray–Darling Basin Agreement of October 1987. It also amended the previous *River Murray Waters Act 1983* (Cwlth) to unite this Agreement and the existing *River Murray Waters Agreement 1982* (Cwlth) as the agreed basis between the Governments of New South Wales, Victoria, South Australia and the Commonwealth for managing the natural resources of the Murray–Darling Basin, and changed the title of the River Murray Waters Act to the Murray–Darling Basin Act.

The Act provides for constitution of the Murray–Darling Basin Ministerial Council, the Murray–Darling Basin Commission and a Community Advisory Committee as the institutional foundation for joint government and community action.

The Commission encompasses the regulatory responsibilities previously provided for under the River Murray Waters Agreement as well as responsibilities for land, environmental and water matters not covered in that Agreement.

A new Murray–Darling Basin Agreement was signed by the Prime Minister and the Premiers of the above three States in June 1992. The new Agreement broadens and strengthens the Commission's role, formalises the Salinity and Drainage Strategy approved in 1989 and provides for implementation of other strategies, for instance the Nutrient Management Strategy, which are yet to be finalised.

Negotiations have been concluded with Queensland to become a party to the Murray–Darling Basin initiative. Parliamentary approval of the new Agreement will be sought during 1992–93, and Queensland's participation will be formalised once this has been obtained.

Rural drainage

With the exception of the reclaimed areas along the lower Murray and certain works associated with metropolitan development, drainage schemes in South Australia are confined to the south–east corner of the State. The area of main benefit has been assessed at 697,430 hectares.

Approximately 1,855 kilometres of drains and 1,226 associated structures, *e.g.* bridges, weirs etc., have been constructed over the past 125 years. These drains vary considerably in size from only a few metres to over 90 metres bottom width.

The system is controlled by the South–Eastern Water Conservation and Drainage Board under the *South–Eastern Water Conservation and Drainage Act 1992*.

8.5 STATISTICAL DIVISIONS AND SUBDIVISIONS

For the purpose of presenting the statistical series of South Australia, the State is divided into a number of areas which are entitled statistical divisions. Although boundaries should remain unchanged over time so as to enable comparisons to be made of constant areas, growth in some areas, together with the adoption of the Adelaide Statistical Division for the 1966 Census, made it desirable to review the boundaries and to select a new group of statistical divisions.

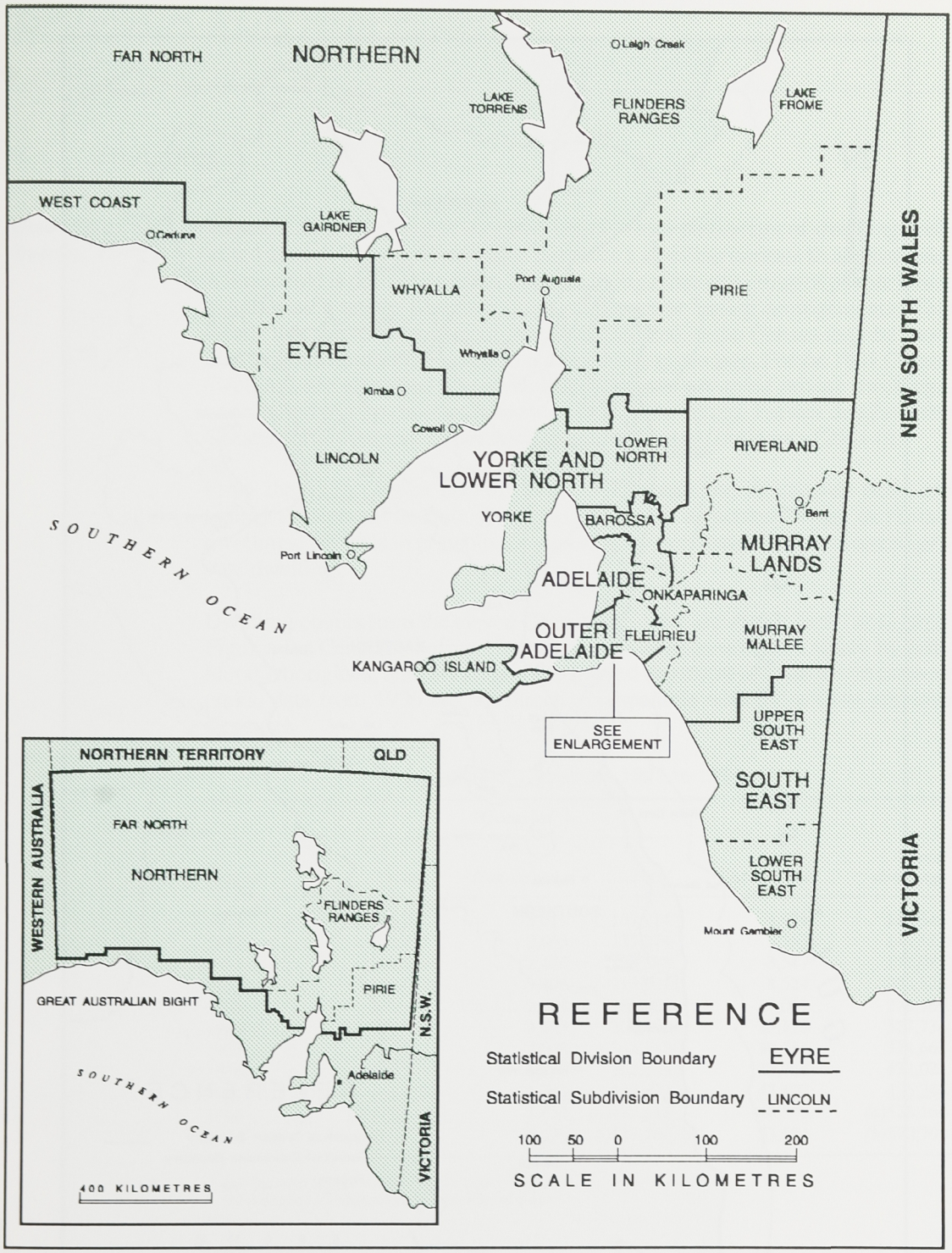
The new divisions were designed to represent closely allied and meaningful areas of production and community interest and where areas smaller than divisions were considered to be important, subdivisions were introduced.

Maps showing statistical divisions and subdivisions are on the following pages. A more detailed article together with descriptions of the divisions and subdivisions was included on pages 135–43 of the *South Australian Year Book 1977*.

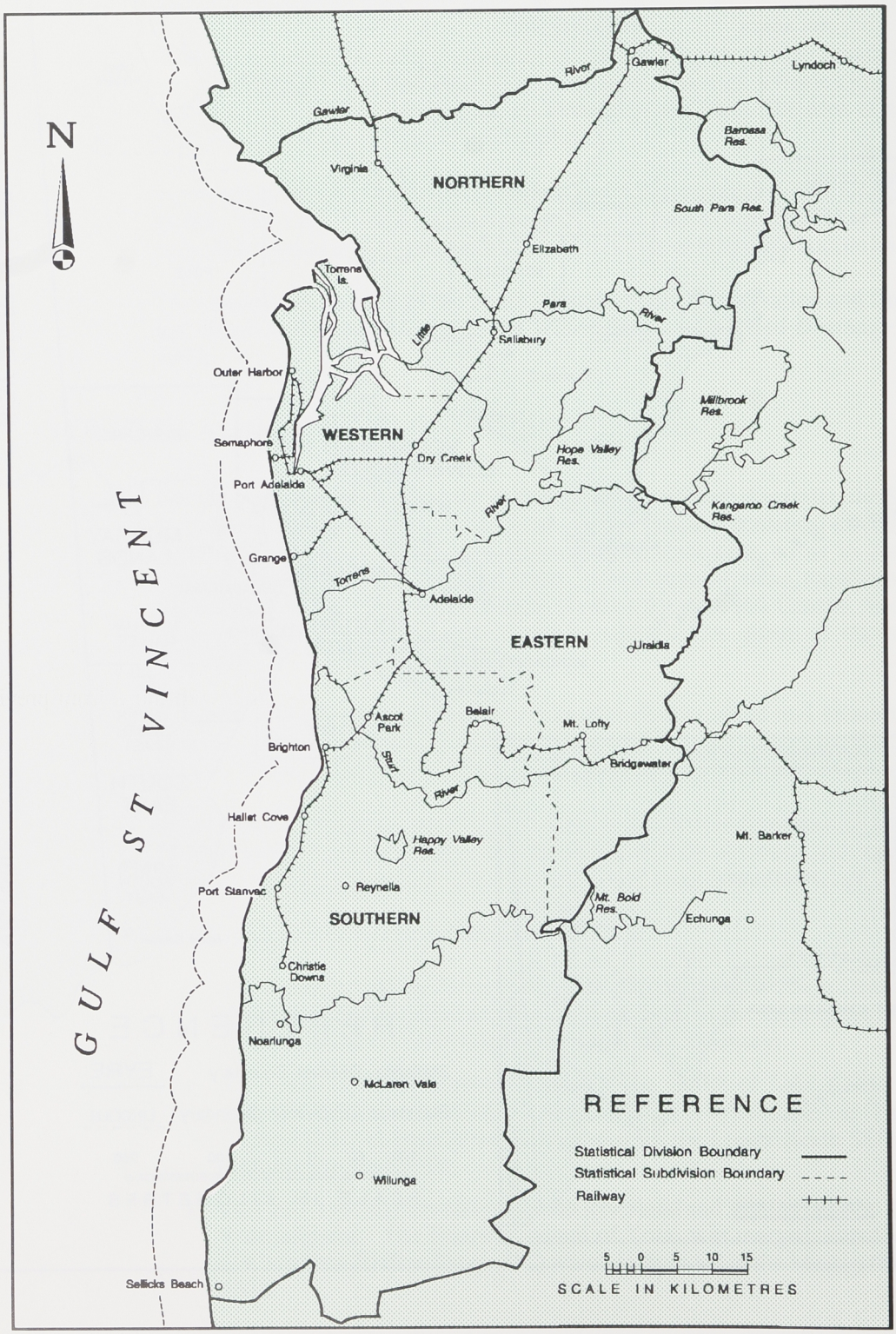
Major changes since 1966 include the following:

- on 1 January 1988 the boundaries of the Northern and Western Statistical Subdivisions were adjusted to reflect changes to the local government area boundaries of Port Adelaide, Enfield and Salisbury;
- on 1 July 1988 the Statistical Subdivision (SSD) of Lake Gilles was abolished when it was merged with the SSD of Whyalla, also the District Council (DC) of Redhill was excluded from the Lower North SSD and added to the Pirie SSD;
- on 1 July 1992 the boundaries of the Riverland and Murray Mallee SSDs were adjusted. The District Council of Truro was merged with Ridley (DC) to form Ridley–Truro (DC) which is included in the Murray Mallee SSD.

SOUTH AUSTRALIA
STATISTICAL DIVISIONS AND SUBDIVISIONS



PORTION OF SOUTH AUSTRALIA
ADELAIDE STATISTICAL DIVISION



Chapter 9

HOUSING AND BUILDING

9.1 HOUSING

Dwellings : Census data

Information on housing is obtained mainly from particulars of dwellings collected at each Census. For Census purposes a dwelling equates to a household. A household is defined as either a person living alone or a group of people living together as a single domestic unit with common eating arrangements. This means that the total number of dwellings counted in the Census may be more than the total number of known structures in any given area. For the 1991 Census dwellings are classified into three basic groups: occupied private dwellings, unoccupied private dwellings and non–private dwellings. Further details of the Census definitions can be obtained from the *Census Dictionary* (2901.0).

From the 1986 Census persons living in caravans etc. in caravan parks are treated as separate households in the same way as persons living in private dwellings, whereas in previous Censuses they were treated as part of a non–private dwelling.

Dwelling counts from the eleven Censuses to 1991 are shown in the next table. Figures for Censuses before 1966 exclude dwellings occupied solely by full–blood Aborigines, and, because of the revised treatment of caravans in caravan parks, data from 1986 are not directly comparable with those from previous Censuses.

Dwellings, Censuses 1921 to 1991

	Occupied				
Census	*Private*	*Non–private*	*Total*	*Unoccupied*	*Total dwellings*
1921	104,295	3,619	107,914	4,431	112,345
1933	136,611	2,663	139,274	5,353	144,627
1947	166,118	2,420	168,538	3,547	172,085
1954	212,095	3,206	215,301	8,524	223,825
1961	259,344	2,564	261,908	17,061	278,969
1966	299,933	2,693	302,626	25,110	327,736
1971	342,064	2,048	344,112	30,553	374,665
1976	390,514	1,739	392,253	39,768	432,021
1981	432,136	1,703	433,839	42,407	476,246
1986	(a)475,987	1,631	(a)477,618	48,546	(a)526,164
1991	(b)515,721	1,539	(b)517,260	53,534	(b)570,794

(a) Includes 3,162 caravans etc. in caravan parks.
(b) Includes 3,710 caravans etc. in caravan parks.

Dwelling structure

The next table provides details on the structure of all dwellings, from the 1991 Census.

Structure of Dwellings, Census 1991

Structure	Dwellings	
	Number	Proportion of total
Separate house	437,934	76.7
Semi–detached, row or terrace house:		
1 storey	67,874	11.9
2 or more storeys	7,574	1.3
Flat or apartment:		
1 or 2 storey block	36,576	6.4
3 or more storey block	4,936	0.9
Attached to a house	1,736	0.3
Caravan etc. in caravan park	3,710	0.6
Other caravan, houseboat etc.	1,505	0.3
Improvised home, campers out	1,084	0.2
House or flat attached to shop or office	2,374	0.4
Not stated, not applicable	5,491	1.0
Total dwellings	*570,794*	*100.0*

(a) Total includes both occupied and unoccupied private and non–private dwellings.

9.2 BUILDING

Building control

The *Building Act 1971* gives local government authorities power to control building operations within their municipality or district. Persons wishing to erect or alter buildings on land within an area to which the Building Act applies are required to submit to the local government authority technical details, plans, drawings and specifications of the work proposed and to receive written approval before commencing operations. Since June 1991 the Building Code of Australia, a set of technical regulations drawn up to have national application, has been available for authorities to regulate such things as materials used, the height of ceilings and the provision of ventilation and drainage. Following approval, local government building inspectors normally visit the construction site to inspect footings and foundations and may visit the site at other times to check that the requirements of the regulations are being complied with.

Builders are licensed and regulated by the Commercial Tribunal under the *Builders Licensing Act 1986*.

Building statistics

These statistics relate to building activity which includes construction of new buildings and alterations and additions to existing buildings. Construction activity not defined as building (*e.g.* construction of roads, bridges, railways, earthworks etc.) is excluded.

In relation to work carried out on existing buildings, the statistics include details of non–structural renovation and refurbishment work and the installation of integral building fixtures for which building approval was obtained. The statistics were compiled from information supplied by local and other government authorities, builders and other individuals and organisations engaged in building activity.

The *ownership of a building* is classified as either *Public Sector or Private Sector* according to the sector of the intended owner of the completed building as evident at the time of approval.

Building approvals

Statistics of building work approved were compiled from:

(a) permits issued by local or other government authorities in areas subject to building control by those authorities; and

(b) contracts let or day labour work authorised by Commonwealth, State, semi–government and local government authorities.

Major building activity which takes place in areas not subject to the normal administrative approval processes (*e.g.* buildings on remote mine sites) is also included.

From July 1990 the statistics cover all approved new residential building jobs valued at $10,000 or more (previously $5,000); approved alterations and additions to residential buildings valued at $10,000 or more (unchanged); all approved non–residential building jobs valued at $50,000 or more (previously $30,000). These changes mainly affect non–residential building data. In particular, care should be taken in interpreting data for specific classes of non–residential building.

In using approvals as an indicator of building activity it should be noted that certain projects may be cancelled, delayed or altered and resubmitted for approval, that large projects may be spread over a number of years, and that building costs may vary over the period of construction.

Building Approvals
($'000)

	1991–92		*1992–93*	
Type of building	*Private*	*Public*	*Private*	*Public*
New houses	609,820	15,848	691,371	22,248
New other residential buildings	96,975	32,943	106,444	20,807
Alterations and additions to residential buildings	122,888	921	129,950	2,635
Hotels etc.	11,604	628	5,398	1,041
Shops	51,701	12,250	35,927	3,856
Factories	38,481	1,423	17,902	3,489
Offices	90,957	27,137	27,678	64,880
Other business premises	53,181	55,334	31,976	7,829
Educational	17,069	78,520	14,299	99,228
Religious	8,375	–	5,793	–
Health	39,759	51,190	19,744	28,994
Entertainment and recreational	31,805	24,575	4,351	7,108
Miscellaneous	6,220	26,374	10,935	27,953
Total value of building	*1,178,834*	*327,143*	*1,101,768*	*290,068*

In recent years the greatest residential building development in the Adelaide Statistical Division has occurred in the statistical local areas of Noarlunga, Tea Tree Gully, Salisbury and Munno Para. In the Rest of the State, the statistical local areas of Mount Barker, Mount Gambier, Murray Bridge, Port Elliot and Goolwa and Victor Harbor provided the highest level of residential building activity. The number of new dwelling units approved in these areas and other selected statistical local areas during the last three years are included in the following table.

Number and Location of New Dwelling Units Approved

Statistical local area	*1990–91*	*1991–92*	*1992–93*
ADELAIDE STATISTICAL DIVISION			
Adelaide (C)	149	150	171
Burnside (C)	206	136	250
Campbelltown (C)	329	374	481
Enfield(C) Pt A & Pt B	287	201	195
Gawler (M)	342	269	216
Happy Valley (C)	439	338	363
Hindmarsh (M)	124	102	73
Marion (C)	566	578	525
Mitcham (C)	212	148	163
Munno Para (C)	562	607	750
Noarlunga (C)	1,676	1,682	1,626
Port Adelaide (C)	344	269	222
Salisbury (C)	926	784	1,116
Stirling (DC)	74	91	87
Tea Tree Gully (C)	1,107	1,241	1,416
Unley (C)	112	132	48
West Torrens (C)	176	182	295
Willunga (DC)	265	290	276
Woodville (C)	266	349	261
Other	674	637	693
Total	*8,836*	*8,560*	*9,227*
REST OF STATE			
Mallala (DC)	139	103	125
Mount Barker (DC)	286	399	452
Mount Gambier (C)	170	187	229
Murray Bridge (DC)	108	119	133
Northern Yorke Peninsula (DC)	49	75	69
Port Augusta (C)	47	31	26
Port Elliot and Goolwa (DC)	145	181	240
Port Lincoln (C)	39	63	84
Port Pirie (C)	41	52	52
Renmark (C)	51	50	57
Roxby Downs (M)	–	33	5
Strathalbyn (DC)	92	67	60
Victor Harbor (DC)	117	185	271
Other	1,286	1,152	1,281
Total	*2,570*	*2,697*	*3,084*
South Australia	**11,406**	**11,257**	**12,311**

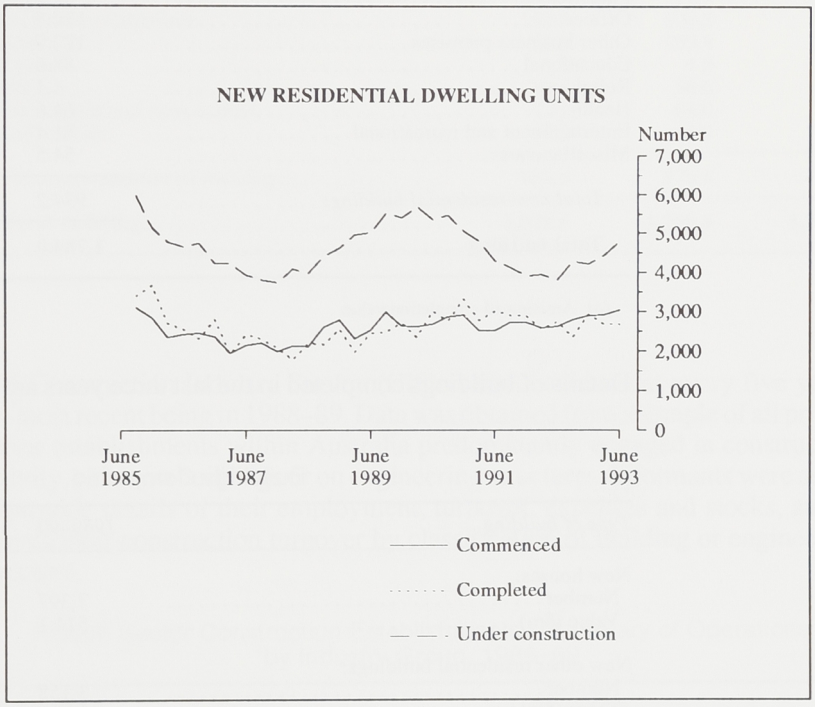
(C) Municipality with city status (DC) District Council (M) Municipality

Building Activity Survey

Building activity data is collected quarterly from builders and other individuals and organisations engaged in building activity. It consists of two components:

(a) a sample survey of private sector house building activity involving new house construction or alterations and additions valued at $10,000 or more to houses; and

(b) a complete enumeration of jobs involving construction of new residential buildings other than private sector houses, all alterations and additions to residential buildings (other than private sector houses) with an approval value of $10,000 or more, and all non–residential building jobs with an approval value of $50,000 or more.



From the data collected in the survey, a considerable amount of information about the building industry in South Australia can be derived. This includes statistics about building work commenced, work done and completed in each period as outlined in the following paragraphs. All values shown exclude the value of land and unless otherwise stated represent the anticipated or actual value of buildings upon completion.

A building is regarded as having been commenced when expenditure on building work is first reported. Commencement data for the last three years are shown in the following table.

Buildings Commenced[(a)]

Type of building	*1989–90*	*1990–91*	*1991–92*
New houses:			
Number	7,174	8,177	8,344
Value ($m)	499.4	580.7	599.7
New other residential buildings:			
Number of dwelling units	3,762	2,644	2,327
Value ($m)	218.7	146.8	127.5
		$ million	
Alterations and additions to residential buildings	111.6	118.2	125.1
Hotels etc.	14.4	15.0	12.8
Shops	314.0	103.4	51.1
Factories	68.9	75.4	47.8
Offices	120.5	90.4	117.8
Other business premises	122.9	72.9	102.0
Educational	88.6	90.1	92.3
Religious	4.4	5.0	6.4
Health	64.6	32.8	86.1
Entertainment and recreational	81.4	29.4	56.7
Miscellaneous	54.5	39.5	34.7
Total non–residential buildings	*934.2*	*553.9*	*607.8*
Total building	**1,764.0**	**1,399.6**	**1,460.2**

(a) Anticipated completion value.

Details of buildings completed in the last three years are given in the next table.

Buildings Completed

Type of building	*1989–90*	*1990–91*	*1991–92*
New houses:			
Number	7,397	8,308	8,432
Value ($m)	514.1	595.7	616.0
New other residential buildings:			
Number	3,158	3,538	2,670
Value ($m)	184.1	212.5	149.6
		$ million	
Alterations and additions to residential buildings	107.7	128.0	121.5
Hotels etc.	61.9	76.3	8.6
Shops	82.0	60.9	378.9
Factories	78.1	120.5	44.9
Offices	305.7	223.4	63.7
Other business premises	129.0	124.6	59.5
Educational	87.0	72.2	91.3
Religious	3.6	4.9	5.3
Health	53.4	53.3	71.0
Entertainment and recreational	66.2	90.0	32.1
Miscellaneous	25.9	41.4	38.3
Total non–residential buildings	*892.9*	*867.4*	*793.7*
Total building	**1,698.8**	**1,803.7**	**1,680.9**

Another measure of building activity is that of value of work done, *i.e.* of work actually carried out on buildings during the period. Details of value of work done for the last three years are given in the following table.

Buildings : Value of Work Done
($ million)

Type of building	*1989–90*	*1990–91*	*1991–92*
New houses	518.9	600.2	607.5
New other residential buildings	205.9	182.1	141.0
Alterations and additions to residential buildings	116.3	122.0	125.1
Hotels etc.	56.2	42.7	9.1
Shops	186.6	257.3	89.4
Factories	92.0	91.5	34.9
Offices	260.3	111.2	79.1
Other business premises	130.9	100.8	68.3
Educational	78.5	100.8	67.5
Religious	4.6	4.8	7.1
Health	70.1	56.6	52.6
Entertainment and recreational	72.3	68.0	37.1
Miscellaneous	37.2	42.9	38.9
Total non–residential buildings	*988.6*	*876.6*	*484.1*
Total building	**1,829.8**	**1,780.8**	**1,357.6**

Construction Industry Survey

The Construction Industry Survey (CIS) is conducted about every five years, the most recent being in 1988–89. Data was obtained from a sample of all private sector establishments within Australia predominantly engaged in construction activity, either on buildings or on engineering structures. Informants were asked to provide details of their employment, turnover, expenses and stocks, and to dissect their construction turnover by classification of building or engineering structure.

Private Sector Construction Establishments : Summary of Operations by Industry Group, 1988–89

	Construction				
Particulars	*Building*	*Engineering*	*General*	*Special trade*	*Total*
Establishments operating during the year (No.)	1,256	371	*1,627*	7,163	**8,790**
Employment ('000)	6.3	2.1	*8.4*	22.5	**30.8**
Wages and salaries ($m)	120.0	39.5	*159.5*	279.0	**438.5**
Turnover ($m)	1,394.9	217.5	*1,612.4*	1,343.9	**2,956.3**
Stocks:					
Opening ($m)	94.4	6.2	*100.5*	28.5	**129.0**
Closing ($m)	167.8	6.0	*173.9*	32.3	**206.2**
Value added ($m)	320.2	80.7	*400.9*	660.4	**1,061.3**

The CIS had a companion survey, the Public Sector Construction Activity Survey and data was obtained from all public sector enterprises in Australia which had expenditure of at least $250,000 on construction and/or repair and maintenance activities during 1988–89.

Public Sector Enterprises Undertaking Construction Activity: Construction, Repair and Maintenance Expenditure, 1988–89

Level of government	*Number of enterprises*	*Work done by own employees*	*Work done by private contractors*	*Total expenditure*
		$'000	*$'000*	*$'000*
Commonwealth	19	320,593	26,330	346,923
State	43	440,650	434,175	874,825
Local	104	121,562	45,767	167,329
Total	*166*	*882,805*	*506,272*	*1,389,077*

The South Australian Housing Trust

The South Australian Housing Trust was established under the *South Australian Housing Trust Act 1936* as the public housing authority. Its charter is to provide housing and related services for those in need, and to do so in ways which contribute, as far as possible, to the social well–being and economic development of the State.

The Trust's sources of funds are loans and grants from the Commonwealth and South Australian Governments, rents and other payments by tenants, repayments under mortgage and the proceeds from the sale of its houses and other assets.

At 30 June 1993 the Trust had 63,014 dwellings in its rental stock. During 1992–93, 932 dwellings were completed. Of these, 9 were for Aboriginal Housing and 33 were for other organisations. Dwellings purchased on the open market numbered 213, of which 62 were for Aboriginal Housing and 72 for other organisations. During 1992–93, 16,369 applications for rental housing were received while approximately 7,993 households were allocated a dwelling. At the end of June 1993 there were 43,001 households on the waiting list.

At 30 June 1993, 76.3 per cent of the Trust's tenants were paying reduced rent because of financial hardship or social disadvantage. Assistance is also provided to other disadvantaged members of the community in the following ways.

- The Rent Relief Scheme, commenced in 1982, with funds made available by both the Commonwealth and South Australian Governments, provides assistance to households on low incomes who face genuine hardship in meeting private rental commitments.
- The Mortgage Relief Scheme, begun in 1982, provides assistance in weekly amounts in the form of a secured interest–free loan and is paid directly to the lender.
- Information on housing, bond assistance, advocacy and counselling is provided for people in a housing crisis. The Trust also has a pool of emergency dwellings for short–term lease.

The *Housing Improvement Act 1940* established minimum standards by which a dwelling may be considered suitable for human habitation. The Act vests in the Trust the power to control the rent of any house which it has declared to be sub–standard. During 1992–93, 679 notices of intention were issued for sub–standard housing. Rents were fixed or revised in respect of 525 houses and 292 houses were released from control of the Act as a result of repairs and renovations.

As well as its public housing role the Trust provides a substantial contribution to the Government's program for the establishment of new industry and the expansion of existing industry within South Australia. This support takes the form of developing and making available industrial land for sale and lease, and the provision of resources for the establishment of factory premises through the Trust's Factory Construction Scheme in collaboration with the Department of Industry, Trade and Technology.

Further references

Additional information may be found in the following ABS publications:

8731.0 *Building Approvals, Australia*
8731.4 *Building Approvals, South Australia*
8741.4 *Dwelling Unit Commencements Reported by Approving Authorities, South Australia*
8750.0 *Building Activity: Dwelling Unit Commencements, Australia, Preliminary*
8752.0 *Building Activity, Australia*
8752.4 *Building Activity, South Australia*

9.3 HOUSING FINANCE

Information on secured finance commitments to individuals for the construction or purchase of dwellings for owner occupation is provided by major lenders. These lenders include banks, permanent building societies, credit unions, insurance companies, finance companies, superannuation funds and general government enterprises.

In the following tables, values shown for 'construction of dwellings' represent commitments made to individuals to fund, by way of progress payments, the erection of dwellings which they will occupy. Values for 'purchase of newly erected dwellings' represent the purchase of dwellings which have been completed within a period of twelve months preceding lodgment of the loan application where the applicant is, or will be, the first occupant. 'Purchase of established dwellings' refers to those completed for a period greater than twelve months preceding the lodgment of the loan application or, if purchased within twelve months, the applicant is not the original occupant.

Number of Dwelling Units for which Loans were Approved to Individuals by Type of Lender

Period	All banks	Permanent building societies	Other lenders	Total
1989–90	17,984	2,851	4,815	25,650
1990–91	18,213	3,254	7,227	28,694
1991–92	23,308	4,479	3,978	31,765

Value of Lending Commitments to Individuals for Construction or Purchase of Dwellings by Type of Lender(a)
($ million)

Period	All banks	Permanent building societies	Other lenders	Total
1989–90	1,051.0	166.5	266.2	1,483.8
1990–91	1,128.0	214.0	448.0	1,790.0
1991–92	1,507.7	336.8	265.1	2,172.7

(a) Includes alterations and additions.

Lending Commitments to Individuals for Construction or Purchase of Dwellings, All Lenders(a)

	For construction of dwellings		For purchase of newly erected dwellings		For purchase of established dwellings	
Period	No.	$m	No.	$m	No.	$m
1989–90	5,253	227.7	865	41.4	19,532	1,118.7
1990–91	6,680	385.1	2,759	173.8	19,255	1,172.2
1991–92	6,608	401.0	3,221	215.1	21,936	1,467.9

(a) Excludes alterations and additions.

Home Start Loan Scheme

The State Government introduced the Home Start Loan Scheme in 1989 which is designed to provide housing finance to first home buyers. It is aimed primarily at low to moderate income earners and the main features of the scheme are the low deposit and affordable mortgage payments. Refinance loans are also available to assist people having difficulty meeting their mortgage repayments through a change in their level of income or family circumstances.

Payments are set at 25 per cent of the initial household income and increase every year in line with the increases in the Consumer Price Index. In the early years of the loan, mortgage payments do not cover all the interest due; unpaid interest is added to the outstanding loan balance and paid later as the borrowers income and payments increase.

The maximum amount of the loan depends on the borrowers assessed household income.

The maximum term of the loan is initially 27 years but this may be altered later to meet the changing needs of the borrower.

Chapter 10

AGRICULTURE, FORESTRY AND FISHERIES

10.1 RURAL INDUSTRIES

The principal source of statistics relating to the rural sector is the Integrated Agricultural Commodity Census, which is conducted throughout Australia at 31 March each year. Data are collected from those establishments engaged in significant agricultural activity, regardless of the main activity of the establishment. Where harvesting of some crops (mainly fruit and vegetables) has not been completed by 31 March, growers are asked to estimate production or provide details at a later date *via* supplementary collections (*e.g.* main crop potatoes and grapes). For the purpose of this Census, an establishment generally comprises the operations of a legal entity from a single physical location or from more than one location, provided that these locations are within the same local government area.

Those establishments which make only a small contribution to overall agricultural production are excluded from the Census. The 1991–92 Census included all establishments which had an estimated value of agricultural operations (EVAO) of $22,500 or more. For the 1991–92 season the Agricultural Census included 13,990 establishments operating on 56,857,087 hectares of land or approximately 58 per cent of the total area of the State.

Agricultural Establishments: Industry and Estimated Value of Agricultural Operations, 1991–92

Industry of establishment / *Description*	*Estimated value of agricultural operations ($'000)*								
	Less than 20	*20–39*	*40–59*	*60–79*	*80–99*	*100–149*	*150–199*	*200 and over*	*Total*
Poultry for meat	–	–	–	–	1	2	1	58	62
Poultry for eggs	1	2	–	4	1	5	4	37	54
Grapes	25	203	240	199	160	190	73	83	1,173
Orchard fruit	34	148	194	150	114	149	87	167	1,043
Potatoes	–	5	10	5	2	16	14	97	149
Vegetables	18	59	60	30	22	43	13	145	390
Cereals	40	92	136	141	166	439	371	944	2,329
Sheep–cereal grain	18	229	382	452	418	898	533	745	3,675
Meat cattle–cereal grain	5	12	4	15	10	22	8	30	106
Sheep–meat cattle	25	103	129	98	98	186	126	204	969
Sheep	120	278	267	216	170	319	149	248	1,767
Meat cattle	91	139	63	32	34	44	25	87	515
Milk cattle	9	33	62	86	101	242	159	150	842
Pigs	1	13	28	22	16	54	43	86	263
Nurseries	21	51	19	17	19	17	9	12	165
Agriculture n.e.c.	20	55	45	31	24	30	13	48	266
Total agriculture	*428*	*1,422*	*1,639*	*1,498*	*1,356*	*2,656*	*1,628*	*3,141*	*13,768*
Other industries	116	30	18	14	8	13	7	16	222
Total all industries	**544**	**1,452**	**1,657**	**1,512**	**1,364**	**2,669**	**1,635**	**3,157**	**13,990**

Rural Establishments : Statistical Divisions

Statistical Division	Establishments		Area of establishments	
	1990–91	1991–92	1990–91	1991–92
	number	number	'000 ha	'000 ha
Adelaide	747	709	37	38
Outer Adelaide	2,539	2,417	757	762
Yorke and Lower North	2,153	2,087	1,641	1,670
Murray Lands	3,580	3,459	3,590	3,587
South East	2,418	2,328	1,695	1,695
Eyre	1,681	1,654	4,913	4,575
Northern	1,364	1,336	44,321	44,529
Total	*14,482*	*13,990*	*56,954*	*56,857*

Agricultural Finance Survey

Statistics on the financial performance of the rural sector are obtained from the Agricultural Finance Survey, which was conducted periodically by the ABS from 1976–77 and annually since 1986–87. This survey provides estimates of turnover, expenditure, cash operating surplus, capital expenditure and indebtedness. Detailed definitions and explanatory notes relating to this Survey are published in *Agricultural Industries, Financial Statistics, Australia, 1991–92* (7507.0).

Financial Estimates of Agricultural Enterprises
($ million)

Items	1989–90	1990–91	1991–92
Sale of crops	1,055.9	808.2	1,010.5
Sales of livestock	363.5	289.0	376.5
Sales of livestock products	672.4	480.1	410.3
Turnover	2,233.8	1,689.9	1,920.2
Purchases and selected expenses	1,054.4	972.0	1,082.6
Value added	1,109.7	599.8	903.7
Adjusted value added	983.1	474.8	770.1
Gross operating surplus	814.4	316.9	641.2
Cash operating surplus	743.0	289.6	460.0
Total net capital expenditure	239.2	108.9	172.9
Gross indebtedness	1,328.6	1,392.3	1,342.6

Land utilisation

The pattern of land use attributed to agricultural establishments included in the annual Integrated Agricultural Commodity Census indicates that vast tracts of land have no attributed land use. These include areas of saltbush, scrub, native vegetation, non–arable land and land not utilised during the particular census period.

Crops were sown to 2.9 million hectares of land during the 1991–92 season, a marginal decrease from the previous year. Climatic conditions, particularly the relatively low winter rainfall and the hot dry summer, favour cereal growing: one advantage being the low incidence of stem rust, a serious disease in the moist areas of the Australian wheat belt.

Sown pastures and grasses accounted for 3.6 million hectares of land in 1991–92. The pattern of land use in South Australia over the past three years is shown in the following table.

Land Utilisation of Establishments with Agricultural Activity
Year Ended 31 March

Particulars	*1990*	*1991*	*1992*
Total establishments	14,636	14,482	13,990
Number of establishments:			
Growing crops	11,558	11,429	11,120
With sown pastures and grasses	8,052	7,630	7,514
Total area of establishments (hectares)	57,479,639	56,954,110	56,857,088
Total area (hectares):			
Used for crops *(a)(b)*	3,042,304	2,933,367	2,919,760
Under sown pastures and grasses	3,786,392	3,647,749	3,614,474

(a) Excludes pastures harvested for hay and seed which have been included in 'area under sown pastures and grasses'. *(b)* Areas of land used for sowing more than one crop in a season have been counted for each crop.

Irrigation

The following table shows the area of all irrigated culture in South Australia for selected seasons from 1983–84 to 1991–92.

Area Under Irrigation[(a)]
(Hectares)

Season	*Vegetables (including potatoes)*	*Fruit*	*Vineyards*	*Other crops*	*Pastures*	*Total*
1983–84	6,413	12,807	16,512	4,644	46,578	86,953
1986–87	6,244	11,865	16,418	5,666	51,573	91,765
1989–90	7,395	13,410	18,151	6,760	53,191	98,907
1990–91	9,400	15,816	21,119	6,056	57,795	110,186
1991–92	9,655	15,027	20,532	6,142	52,699	104,055

(a) Irrigation details collected on an irregular basis.

In 1991–92 there were 3,828 establishments irrigated. The most important irrigation areas are those located in the Murray Valley. The main crops in the Upper Murray irrigation areas are grapes, citrus fruit and stone fruit while the reclaimed swamp areas of the Lower Murray irrigation areas are used mainly for pastures.

Fertilisers

Nearly all soils in the agricultural areas of South Australia are deficient in phosphorus, and therefore superphosphate is used on both crops and pastures in large quantities to overcome this deficiency. In some areas trace elements (manganese, copper, zinc and molybdenum) are added to the superphosphate to rectify the chronic shortage of these elements.

Total Crops and Pasture Fertilised

Year	*Area fertilised*	*Fertiliser used*	*Per hectare*
	'000 ha	*tonnes*	*kg*
1987–88	4,420	498,356	113
1988–89	4,463	516,242	116
1989–90	4,418	496,447	112
1990–91	3,833	386,558	101
1991–92	3,403	323,089	95

Wheat

The area sown to wheat for grain in South Australia during the 1991–92 season was 1,296,770 hectares which yielded 2,141,046 tonnes. This represented 18.1 per cent and 20.3 per cent of the Australian total respectively.

In the past twenty years a feature of the industry has been that average yields have fluctuated around a higher level mainly because of improved farming practices, including the adoption of nitrogen–building legumes in the crop rotation cycle. The average yield for the 1991–92 season was 1.65 tonnes per hectare, up from 1.40 tonnes per hectare in 1990–91.

Wheatgrowing districts

Wheatgrowing in South Australia is virtually restricted to the belt between the 200 millimetre and 450 millimetre rainfall isohyets for the period April–November inclusive. The principal wheat producing districts are in the Eyre, Yorke and Lower North, Murray Lands and Northern Statistical Divisions. These districts accounted for 96 per cent of the area sown in 1991–92.

Wheat for Grain by Statistical Division

	Area		*Production*	
Particulars	*1990–91*	*1991–92*	*1990–91*	*1991–92*
	'000 ha	*'000 ha*	*'000 tonnes*	*'000 tonnes*
Statistical Division;				
Adelaide	1	1	3	2
Outer Adelaide	33	31	59	62
Yorke and Lower North	249	231	502	556
Murray Lands	203	192	178	196
South East	25	19	58	45
Eyre	757	663	882	978
Northern	179	160	338	302
Total for grain	*1,448*	*1,297*	*2,021*	*2,141*

Varieties

In each of the Australian States a committee examines and recommends the wheat varieties which should be grown by farmers. The South Australian Advisory Committee on Wheat Quality was established in 1962. Dividing the State into seven zones, recommendations of wheat varieties are decided each year by bringing together relevant available information on breeding, testing, commercial production, handling and end use of wheat and more particularly of specific varieties. Protein content and potential yield are key factors in these recommendations.

The South Australian Department of Agriculture and the Australian Wheat Board encourage growers to produce wheat with uniform characteristics in both the Hard class and Australian Standard White (ASW) class. This can be done more successfully if only a few of the better varieties are grown by farmers.

Marketing

Australian Wheat Board

The Australian Wheat Board was formed on 21 September 1939 and given powers to run the domestic and export marketing of Australia's wheat crop.

Under the *Wheat Marketing Act 1989* (Cwlth), all sales of wheat within Australia were deregulated from 1 July 1989. The Australian Wheat Board has retained full control of wheat sold for export from Australia. The Board will continue to buy on the domestic market along with other buyers who can now engage in such operations. The new legislation also permits the Board to trade in other grains and legumes on both the domestic and export markets.

Deliveries to the Australian Wheat Board
('000 tonnes)

Season	*South Australia*	*Australia*
1982–83	588	7,887
1983–84	2,715	21,067
1984–85	1,921	17,546
1985–86	1,773	15,099
1986–87	2,377	15,310
1987–88	1,823	10,740
1988–89	1,318	12,953
1989–90	2,701	12,969
1990–91	2,030	13,522
1991–92	2,040	8,075

Source: Australian Wheat Board.

Bulk Handling

South Australian Co–operative Bulk Handling Ltd is the sole bulk grain handling authority in this State and is owned, financed and controlled by the growers.

Bulk Handling Capacity, 30 September 1992

Division	*Number of sites*	*Total permanent storage*
		tonnes
Ardrossan	1	283,400
Port Adelaide	56	1,340,725
Port Giles	1	239,100
Port Lincoln	27	1,157,700
Port Pirie	17	555,100
Thevenard	9	434,330
Wallaroo	6	462,100
Total	*117*	*4,472,455*

Source: South Australian Co–operative Bulk Handling Ltd.

Barley

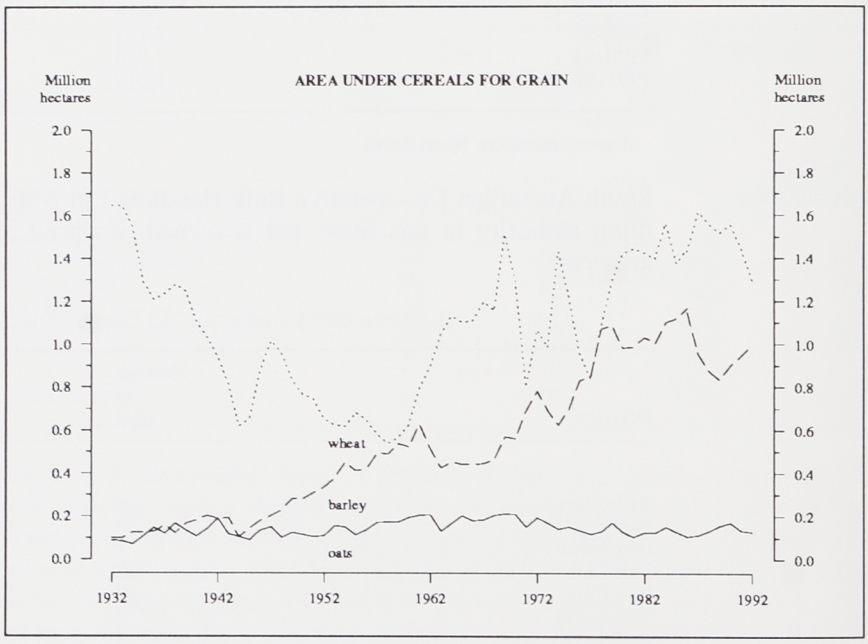
Production

Barley is grown in all States of Australia, with the major producing area being South Australia. It is grown principally as a grain crop, although in some areas it is used as a fodder crop for grazing with grain being subsequently harvested if conditions are suitable. Barley is used primarily for stockfeed and malting purposes and, on a small scale, for human consumption.

The area sown to barley for grain in South Australia during the 1991–92 season was 999,156 hectares which yielded a production of 1,88,548 tonnes. This represented 36.4 per cent and 41.5 per cent of the Australian total respectively. The Yorke and Lower North Statistical Division, which includes the Yorke Peninsula, accounted for 814,696 tonnes or 43.3 per cent of the State's production during this period.

The ideal malting barley has a dry, plump, undamaged grain with a low protein content. Production of malting barley requires an area of dependable rainfall and a ripening period somewhat prolonged by cool conditions without high temperatures and drying winds.

Yorke Peninsula is the major barley producing district in South Australia, accounting for approximately 34 per cent of the total South Australian crop. This area generally has an ideal climate for barley production as the moisture laden breezes off the Gulfs retard ripening.



Barley for Grain by Statistical Division

Particulars	Area		Production	
	1990–91	1991–92	1990–91	1991–92
	'000 ha	'000 ha	'000 tonnes	'000 tonnes
Statistical Division;				
Adelaide	2	2	3	4
Outer Adelaide	43	43	73	88
Yorke and Lower North	320	341	656	815
Murray Lands	236	234	230	254
South East	26	28	48	48
Eyre	233	255	326	465
Northern	85	97	169	209
Total	*945*	*999*	*1,506*	*1,882*

Varieties

A number of improved barley varieties (Galleon, Forrest, Schooner, Skiff) have been released to farmers over the last decade. Schooner, a high yielding malting variety, bred by the Waite Agricultural Research Institute and released in 1983 has now become the predominant malting variety grown in South Australia.

Percentage of Area Planted to Barley Varieties

Variety	*Type*	*1989–90*	*1990–91*	*1991–92*
Schooner	Malting	32.1	32.2	34.9
Clipper	Malting	1.0	0.9	1.2
Weeah	Malting	0.8	0.4	0.4
Skiff	Feed	0.3	1.8	3.1
Galleon	Feed	56.0	56.4	53.0
Forrest	Feed	8.3	6.3	5.0
Other	..	1.5	2.0	2.4

Source: Australian Barley Board.

Marketing

The Australian Barley Board, which commenced operations in 1939, is the statutory marketing authority for barley and oats grown in South Australia and for barley grown in Victoria. In 1990 its area of operations was expanded to include the marketing of field peas, faba beans, chickpeas and vetch in both States and oats in Victoria. The Board classifies barley on sample at the time of delivery for grower payment purposes. Classification takes into account the physical characteristics of variety. The Board normally receives two major grades of barley *viz.* malting and feed, with each of these being subdivided into further categories depending on seasonal conditions and/or market requirements. The classification system used by the Board segregates low protein barley for use by the malting and brewing industries, while the higher protein barley is included in the feed grade.

Australian Barley Board Receivals
(Tonnes)

Season	*Malting*	*Schooner No. 3 malting*	*Feed*	*Total*
1990–91	139,713	85,101	1,135,259	1,360,073
1991–92	351,637	144,562	1,263,569	1,759,768
1992–93	315,000	200,000	1,227,061	1,742,061

Source: Australian Barley Board.

Oats

Oats is an extremely versatile crop, providing not only valuable winter grazing when pastures are dormant but also a grain which is a valuable cereal food for both livestock and human consumption. The majority of the crop is used locally for animal fodder with only a small proportion being exported. As is the case with barley, some of the area sown for grain and hay is grazed until June or July, then allowed to re–grow to produce a crop which is subsequently cut for hay or harvested.

The Australian Barley Board is the marketing authority for oats grown in South Australia and Victoria.

The main oat growing regions in South Australia are the Eyre Peninsula, the Lower North, and the Murray Mallee regions. During the 1991–92 season 215,075 hectares of land were sown to oats in South Australia; 12.2 per cent of the Australian total.

Oats Grown by Statistical Division

Use and geographical area	Area		Production	
	1990–91	1991–92	1990–91	1991–92
	'000 ha	'000 ha	'000 tonnes	'000 tonnes
For grain:				
Statistical Division;				
Adelaide	0.2	0.2	0.4	0.5
Outer Adelaide	10.9	10.7	16.1	20.1
Yorke and Lower North	19.0	20.1	27.9	35.0
Murray Lands	19.1	19.6	15.2	17.1
South East	11.6	12.2	23.5	21.1
Eyre	62.8	56.0	50.5	63.4
Northern	10.9	10.4	14.0	15.4
Total for grain	*134.6*	*129.3*	*147.6*	*172.5*
For hay	56.6	59.3	159.5	210.9
Fed off or cut for green feed or silage	37.5	26.5	..	..
Total all oats	**228.6**	**215.1**	..	..

Rye

Rye is a minor crop, but it is used to control sand drift and particularly to stabilise the light soils of the Murray Mallee. Because the sands are deficient in two main nutrients (nitrogen and phosphorus), a mixed superphosphate–ammonia fertiliser is sown with the rye seed early in the season. The rapid early growth of the rye while the ground is still warm and before the strong winds of winter cause sandblast, is at present the most effective form of controlling drifting sand.

Rye provides early greenfeed while some grain is produced on a number of farms. Although most grain is used for stockfeed, varying quantities are exported in different years for milling. Rye hay is of poor nutritional quality and only a few hundred tonnes are produced each year. In 1991–92, 28,569 hectares of rye for grain yielded 12,940 tonnes.

Pastures

The area reported as being under various types of pasture is shown in the following table.

Area Under Pasture at 31 March
(Hectares)

Type of pasture	1990	1991	1992
Pure lucerne	119,468	131,631	100,213
Clovers and/or medics	921,654)		478,715
Sown grasses only	155,909)	3,516,118	213,339
Mixtures of grasses, legumes etc.	2,589,361)		2,822,208
Native pasture	10,833,584	15,815,242	18,993,261
Total	*14,619,976*	*19,462,991*	*22,607,736*

The Murray Mallee and Eyre Peninsula have been transformed from unstable farming districts to productive areas through the sowing of improved pastures. The South East Statistical Division has more improved pastures than any other statistical division within the State.

Pastures Other Than Native Pasture at 31 March
('000 hectares)

Statistical Division	*1990*	*1991*	*1992*
Adelaide	11	10	10
Outer Adelaide	373	356	359
Yorke and Lower North	324	277	280
Murray Lands	858	829	843
South East	1,363	1,314	1,219
Eyre	714	723	771
Northern	145	139	131
Total	*3,786*	*3,648*	*3,614*

The following table shows the area and production of pastures cut for hay, as well as the area cut for green feed or silage, for the past two years.

Production of Hay and Green Feed from Pastures

	Area		*Production*	
Use	*1990–91*	*1991–92*	*1990–91*	*1991–92*
	hectares	*hectares*	*tonnes*	*tonnes*
Pure lucerne:				
Cut for hay	20,594	21,440	90,565	89,122
Cut for green feed or silage	*(a)*	*(a)*	..	..
Other than pure lucerne:				
Cut for hay	108,927	118,937	346,308	374,058
Cut for green feed or silage	*(a)*6,425	*(a)*7,571	..	..
Total	*135,945*	*147,948*	..	..

(a) Lucerne included with other.

Vegetables

Much of the production of the market garden industry comes from properties with easy access to the Adelaide market. Of the total area of 10,699 hectares devoted to market gardens, districts adjacent to Adelaide account for 4,158 hectares producing all types of vegetables.

Almost 2,630 hectares of vegetables are cultivated in the South East Division, with 2,177 hectares being potatoes. An area of some 27 hectares in the Northern Division (mainly on the coastal plains near Port Pirie) is used for the production of vegetables and two–thirds of this area is used for pea and potato production.

Along the River Murray 2,828 hectares is devoted to the production of potatoes, onions, carrots, tomatoes, and rock melons with small areas of most other vegetables grown for local and interstate markets.

The bulk of the potato production is from the central and southern Adelaide Hills and the Mount Gambier area. The 1991–92 average yield for the State was 33 tonnes per hectare.

Principal Vegetables Grown for Human Consumption

Vegetable	Area		Production	
	1990–91	1991–92	1990–91	1991–92
	hectares	hectares	tonnes	tonnes
Broccoli	414	480	2,598	2,970
Brussels sprouts	100	153	1,248	3,124
Cabbages *(a)*	230	200	6,259	6,212
Carrots	419	520	13,053	16,033
Cauliflowers	329	274	14,964	8,339
Celery	56	51	4,448	4,235
Cucumbers	47	44	1,915	1,655
Lettuces	345	313	9,314	9,369
Onions, white and brown	1,171	1,204	55,781	58,188
Potatoes:				
Early crop	2,996	3,553	98,563	121,866
Main crop	2,379	2,401	76,767	76,778
Pumpkins	402	436	8,097	8,919
Sweetcorn	67	56	804	730
Tomatoes:				
Field	145	156	6,234	5,436
Glasshouse	42	39	2,688	2,070
Total (incl. other)	*9,916*	*10,699*	..	..

(a) Includes Chinese cabbage.

Grapes

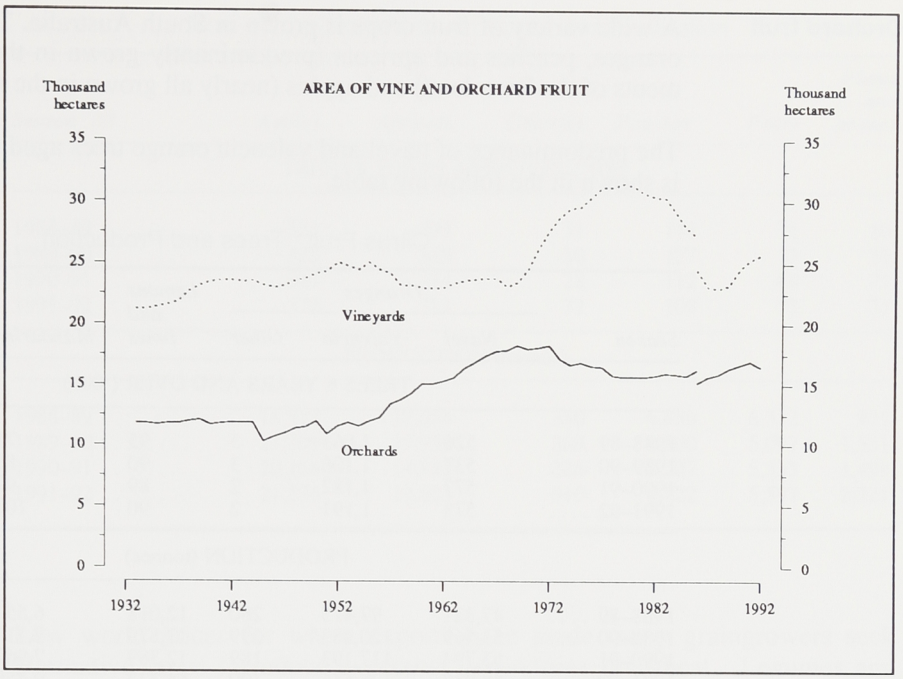
Approximately 42 per cent of Australia's vineyard area is located in South Australia where in 1991–92, 93 per cent of the grapes were used for winemaking. South Australia in the same year produced 327,839 tonnes of grapes for winemaking, 23,081 tonnes for the production of dried fruit, and 3,092 tonnes for other purposes.

Area and Production of Vineyards

Season	Vines		Production of grapes for		
	Bearing	Not yet bearing	Wine	Table	Drying (fresh weight)
	hectares	hectares	tonnes	tonnes	tonnes
1988–89	21,791	1,482	310,427	2,572	14,566
1989–90	22,295	2,352	316,423	2,799	21,562
1990–91	22,686	2,738	290,832	3,189	22,848
1991–92	23,444	2,340	327,853	3,092	23,080

The area planted to vines at harvest 1992 was 25,784 hectares and total production being 354,025 tonnes.

The steady decline in the area of vineyards during the 1980s has now been reversed. There has been a major increase in plantings in the Adelaide Hills, Barossa and South East areas over the past four years.



Grape growing districts

The grape growing districts of South Australia are subject to substantial variety in geographical location, climatic variation and soil condition and can be divided into seven easily recognisable regions ranging from the Clare–Watervale district in the north to the southern limit of the grape growing area at Coonawarra in the south–east of the State, and bounded by the irrigated areas of the River Murray to the east.

Grape varieties

Premium varieties, including Cabernet Sauvignon, Chardonnay and Pinot Noir have recorded increases in area, whilst areas of other varieties such as Grenache, Mataro and Doradillo declined. The decline in plantings of Shiraz has been reversed, with significant new plantings being made in recent years.

Area of Principal Varieties of Vine
(Hectares)

Variety	*1989–90*	*1990–91*	*1991–92*
Red grapes:			
Cabernet Sauvignon	3,015	3,333	3,679
Currant	425	422	403
Grenache	1,881	1,800	1,752
Mataro	478	491	482
Pinot Noir	555	590	552
Shiraz	3,084	3,336	3,603
White grapes:			
Chardonnay	1,939	2,196	2,345
Doradillo	659	600	553
Muscat Gordo Blanco	1,781	1,723	1,651
Palomino and Pedro Ximenes	1,047	942	801
Riesling	2,876	2,918	2,859
Sauvignon Blanc	490	506	510
Semillon	760	840	888
Sultana	1,868	1,798	1,775

Orchard fruit

A wide variety of fruit crops is grown in South Australia. The main types are oranges, peaches and apricots (predominantly grown in the irrigation settlements of the Riverland) and apples (nearly all grown in the Adelaide Hills).

The predominance of navel and valencia orange trees aged six years and over is shown in the following table.

Citrus Fruit : Trees and Production

Season	Oranges			Lemons and limes	Mandarins	Grapefruit	Total(a)
	Navel	Valencia	Other				
	TREES 6 YEARS AND OVER ('000)						
1988–89	526	1,065	3	95	71	72	1,835
1989–90	537	1,106	3	90	85	69	1,895
1990–91	577	1,182	2	89	97	66	2,023
1991–92	573	1,191	2	90	108	60	2,036
	PRODUCTION (tonnes)						
1988–89	47,321	97,415	260	12,018	6,551	10,311	173,970
1989–90	53,569	120,483	299	13,879	7,111	10,498	206,266
1990–91	53,794	117,193	189	12,389	7,967	9,159	202,851
1991–92	58,932	128,646	190	14,222	9,459	9,281	221,498

(a) Includes other citrus.

Citrus growing is concentrated in the irrigation settlements of the Riverland. Over the past five years production of navels, valencias and total citrus have remained relatively constant when allowance is made for fluctuations mainly related to adverse weather. The Australian citrus industry during that time has increasingly been exposed to competition from big developing overseas plantations. Achievements over this period have been the development of export markets for fresh citrus and import substitution by the industry.

Apple growing is the principal non–citrus fruit industry of South Australia and is concentrated in the Adelaide Hills where approximately 16,000 tonnes were produced in 1991–92.

The stone fruits industry became important following development of the irrigation schemes. South Australia is the major apricot–producing State, with the greater part of the crop being dried.

A large proportion of Australia's almonds are produced in South Australia, mainly grown in the Riverland region. In 1991–92, 1,504 tonnes were produced from 410,000 trees of bearing age in South Australia.

Avocados, cherries, pears, plums and prunes, and strawberries are the most important of the remaining crops.

The Upper Murray irrigation areas and the Barossa Valley of South Australia account for almost the entire Australian production of dried apricots, peaches, pears and nectarines. A small proportion of the Australian production of dried prunes is produced in the Barossa Valley and Noarlunga district.

Non–citrus Orchard Fruit : Trees and Production

Season	*Apples*	*Apricots*	*Cherries*	*Peaches*	*Pears*	*Plums and prunes*
	TREES 6 YEARS AND OVER ('000)					
1988–89	321	293	31	114	71	50
1989–90	325	319	30	127	73	59
1990–91	397	314	28	112	68	71
1991–92	370	317	32	109	73	72
	PRODUCTION (tonnes)					
1988–89	18,317	17,054	330	6,850	6,312	975
1989–90	21,709	17,959	399	8,800	5,097	1,531
1990–91	20,166	14,882	325	8,207	5,333	1,498
1991–92	21,576	19,625	515	8,222	5,597	2,721

Other crops

Low world prices for wheat exports have made many graingrowers seek alternative crops to reduce excessive dependence on wheat. Legumes and oilseeds have for many years been used in rotation programmes assisting as cereal disease–break crops. Legumes have the added advantage of their ability to fix atmospheric nitrogen (*via* the nodules of rhizobia on their roots) and thus to increase yields of cereal crops. Over the past decade the area of field peas and lupins has more than doubled, reaching 144,277 hectares and 47,823 hectares respectively in the year ending March 1992. Other legumes have increased by far higher proportions with chick peas reaching 16,448 hectares, field beans 27,858 hectares. The exceptions, with a decline over the decade, are lentils with 200 hectares and vetch for seed with 1,327 hectares.

The development of canola from rapeseed and lanola from linseed have made these crops more suited to domestic use particularly as an alternative to sunflower oil for margarine. This has led to an increase in the area sown and production over the past three years of these two oilseeds. Total area of the four main oilseeds in the State in 1991–92 was 15,323 hectares compared with 7,191 hectares in the previous year.

Pasture and grass seed, vegetable seed and coriander are other crops recording big increases in area, approximately tripling over the decade. Pasture and grass seed were sown on 32,951 hectares, vegetable seed on 1,327 hectares and coriander on 2,111 hectares in 1991–92.

A considerable portion of the area devoted to nurseries is found in the vicinity of Adelaide and there are several fruit tree nurseries in the horticultural districts of the River Murray.

Value of agricultural production

The value of agricultural production is expressed in terms of gross value and local value. Gross value is defined as the value placed on recorded production at wholesale prices realised in principal markets. Where products are absorbed at a local point or become raw material for a secondary industry the value in each case is presumed to be the value of the principal market. Local value equals the gross value of production less marketing costs.

Value and prices of crops

The gross value of crops (including pastures) for South Australia in the 1991–92 season was estimated at $1,379 million.

Gross Value of Principal Crops
($'000)

Commodity	*1989–90*	*1990–91*	*1991–92*
Cereals:			
Wheat	516,195	274,893	430,448
Barley	281,752	193,897	266,060
Oats	28,332	12,437	18,474
Rye	1,476	1,881	2,653
Crops for hay	23,822	22,604	30,781
Lupins for grain	9,075	6,023	9,826
Rapeseed	1,676	1,643	2,721
Field peas	33,471	31,533	40,482
Field beans	7,019	6,722	11,092
Fruit (excluding grapes):			
Citrus	64,509	64,104	82,816
Apples	23,906	23,662	26,957
Apricots	20,693	16,311	23,912
Peaches	4,535	4,852	4,935
Pears	4,622	4,975	6,965
Strawberries	6,168	6,396	6,182
Other	13,345	14,498	19,299
Vine fruit:			
Wine grapes	134,625	100,991	130,005
Table grapes	2,781	3,146	2,412
Dried currants, raisins, etc.	9,396	11,137	11,708
Vegetables:			
Carrots	11,340	9,852	10,559
Lettuce	8,626	10,106	9,041
Potatoes	60,562	56,330	57,719
Tomatoes	6,782	9,021	9,295
Onions	28,878	22,521	17,807
Other	48,787	42,707	47,576
Other crops	31,154	28,194	36,369
Total crops (excluding pastures)	*1,383,527*	*980,437*	*1,316,095*
Pastures:			
Pasture seed	17,663	17,928	21,029
Pastures cut for hay	41,230	42,453	42,190
Total pastures	*58,894*	*60,381*	*63,219*
Gross value of crops	**1,442,421**	**1,040,818**	**1,379,314**

Market prices of principal crops grown in South Australia for the years 1989–90 to 1991–92 are set out in the following table.

Prices of Principal Crops
(Dollars per tonne)

Commodity	*1989–90*	*1990–91*	*1991–92*
Cereals:			
Wheat *(a)*	199.39	137.64	203.58
Barley *(a)*	167.63	132.95	144.81
Oats	123.67	105.81	124.30
Rye	179.63	168.98	205.00
Fruit:			
Apples	1,150.00	1,222.50	1,306.95
Apricots	1,350.00	1,515.00	1,670.00
Peaches	1,140.00	1,253.00	1,420.00
Pears	1,113.00	1,198.00	1,424.00
Oranges;			
Navel *(a)*	380.00	363.00	359.00
Other *(a)*	291.00	303.00	391.00
Grapes;			
Table	1,132.00	1,087.00	975.00
Wine *(b)*	425.46	347.25	396.55
Vegetables:			
Potatoes *(a)*	375.56	321.28	290.57
Onions	520.50	408.50	304.50
Tomatoes *(a)*	859.78	1,011.03	1,238.35

(a) Average price realised. *(b)* Weighted average price at winery.

Pastoral and dairying

Pastoral activities, with sheep grazing predominant, are widespread in South Australia under widely varying climatic conditions from the arid saltbush plains in the Far North through to the lush, well–watered pastures of the South East. South Australia has approximately 11 per cent of the nation's sheep and 4 per cent of cattle.

The dog fence

This fence is an unbroken barrier of wire netting about two metres high extending for more than 8,000 kilometres through South Australia, along the South Australia–New South Wales and the New South Wales–Queensland borders and through part of Queensland. It has been erected to protect the sheep lands of these States from dingoes.

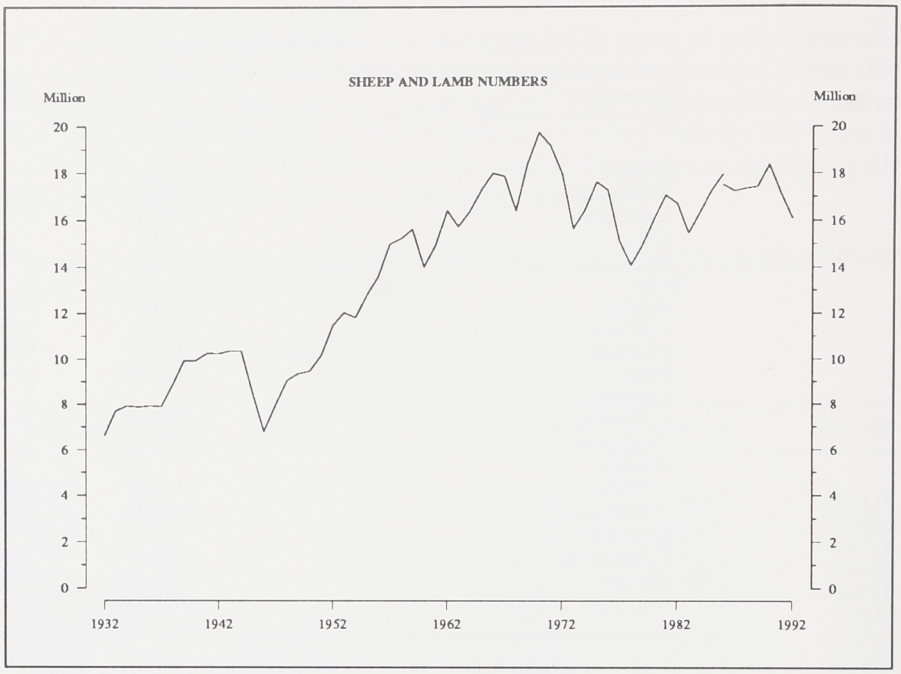
Sheep

Numbers and distribution

At 31 March 1992 sheep in South Australia numbered 16,072,135. The next table shows the total number of sheep in statistical divisions at 31 March for the years 1990 to 1992.

Sheep Numbers : Statistical Divisions, at 31 March
('000)

Statistical Division	*1990*	*1991*	*1992*
Adelaide	43	34	31
Outer Adelaide	2,250	2,087	2,005
Yorke and Lower North	2,282	2,013	1,985
Murray Lands	2,506	2,332	2,105
South East	5,237	4,743	4,354
Eyre	2,631	2,610	2,594
Northern	3,415	3,333	2,997
Total	*18,363*	*17,153*	*16,072*



Breeds of sheep

The predominant breed in South Australia is the Merino which accounts for 90 per cent of the total sheep numbers. The South Australian Merino, having a robust constitution and a capacity to travel long distances to water, has adapted well to the hot, dry conditions of the interior.

Of the remaining recognised breeds, the Australasian breeds, Corriedale and Polwarth, are most important. The Corriedale and Polwarth are dual purpose sheep breeds used for meat but at the same time producing wool of good quality. The Corriedale is a fixed cross between Lincoln rams and Merino ewes while the Polwarth is a fixed comeback breed from the mating of Merino rams with Lincoln–Merino ewes.

British longwools (Border Leicester, Cheviot and Romney Marsh) are used for mating with the Merino or crossbred ewes to produce fat lambs, but useful types of comeback and crossbred wools are also yielded. British shortwools (Dorset Horn, Ryeland, Suffolk, Southdown and Shropshire) are used principally for production of export lambs. The following table shows the composition of the sheep flock in South Australia at 31 March from 1988 to 1992.

Composition of Sheep Flock, at 31 March ('000)

Year	*Rams*	*Breeding ewes*	*Other ewes*	*Wethers*	*Lambs and hoggets (under one year)*	*Total sheep*
1988	226	8,478	433	4,083	4,132	17,352
1989	223	8,542	465	4,259	3,925	17,414
1990	226	8,565	505	4,778	4,290	18,363
1991	210	7,464	1,079	4,612	3,788	17,153
1992	201	7,483	782	4,320	3,286	16,072

Lambing

During the year ended 31 March 1992, 6,343,548 ewes were mated and the number of lambs marked totalled 4,913,450. The following table provides details of lambing activity during the years 1989–90 to 1991–92.

Ewes Mated and Lambing During Season

Description	*Unit*	*1989–90*	*1990–91*	*1991–92*
Breeding ewes at start of year	number	8,541,680	8,564,716	7,483,370
Intended matings for lambing during season	number	7,874,570	7,892,018	6,570,584
Actual matings during season	number	7,575,889	7,282,470	6,343,548
Actual matings to intended matings	per cent	96.2	92.3	96.5
Lambs marked	number	6,455,939	5,831,773	4,913,450
Lambs marked to:				
Actual matings	per cent	85.2	80.1	77.5
Breeding ewes	per cent	75.4	78.1	65.7

Shearing and wool–clip

In the agricultural areas of the State most shearing takes place during the late winter and spring months, August to November. Shearing in the South East Division occurs somewhat later, with most of the wool–clip being obtained in the periods October–November, February–March and August–September.

Approximately 93 per cent of the total shorn wool is obtained from adult sheep. The average fleeceweight in South Australia for 1991–92 was 5.7 kg a head for adult sheep, with a record 6.6 kg a head being achieved in 1983–84. This is significantly higher than the yield obtained in other States, and is primarily because of the larger size of the South Australian Merino, its broader wool quality and longer thicker–stapled fleece.

Sheep and Lambs Shorn : Wool–clip and Average Fleeceweight

Classification	*1989–90*	*1990–91*	*1991–92*
NUMBER SHORN ('000)			
Sheep	16,281	16,530	15,507
Lambs	4,587	4,291	3,400
Total	*20,868*	*20,821*	*18,907*
WOOL–CLIP ('000 kg)			
Sheep	94,059	88,996	83,950
Lambs	8,865	7,470	6,130
Crutchings	4,623	4,519	4,118
Total	*107,547*	*100,985*	*94,197*
AVERAGE FLEECEWEIGHT (kg)*(a)*			
Sheep	6.1	5.7	5.7
Sheep and lambs	5.2	4.9	5.0

(a) Includes crutchings.

A breakdown of the figures for 1991–92 by statistical division is given in the next table. This shows the high average fleeceweight obtained in the northern pastoral areas. The relatively light average fleece obtained in the South East Division is explained partly by the lower proportion of Merino sheep, but more importantly by the lighter wool quality of the smaller framed sheep in this area.

Sheep and Lambs Shorn : Wool–clip, Statistical Divisions, 1991–92

Statistical Division	Number shorn			Wool–clip		
	Sheep	Lambs	Total	Sheep (a)	Lambs	Total (a)
	'000	'000	'000	'000 kg	'000 kg	'000 kg
Adelaide	89	3	93	169	6	175
Outer Adelaide	1,949	334	2,283	10,362	552	10,914
Yorke and Lower North	1,861	452	2,313	11,097	816	11,913
Murray Lands	2,078	508	2,587	12,219	856	13,074
South East	4,247	973	5,220	22,620	1,709	24,329
Eyre	2,432	481	2,913	14,649	811	15,460
Northern	2,850	647	3,498	16,952	1,380	18,331
Total	*15,507*	*3,400*	*18,907*	*88,068*	*6,130*	*94,197*

(a) Includes crutchings.

Wool industry

Production

Total wool production consists of shorn wool (including crutchings) plus dead wool and wool exported on skins. The next table shows wool production and value from 1989–90 to 1991–92. After the collapse in wool prices in 1990–91 the gross value of production has fallen to $324.0 million in 1991–92 from the peak of $612.2 million in 1988–89.

Wool Production and Value

Year	Production			Value of wool production
	Receivals of shorn wool (a)	Other(b)	Total	
	'000 kg	'000 kg	'000 kg	$'000
1989–90	126,515	9,780	136,294	597,296
1990–91	112,083	6,486	118,569	395,816
1991–92	105,005	5,845	110,850	324,043

(a) Source: The National Council of Wool Selling Brokers of Australia and ABS Dealers Collection.
(b) Includes fellmongered wool, dead wool, and wool exported on skins.

Quality and marketing

Most of the wool grown in South Australia is sold through the auction system. Approximately 87 per cent is received by the Adelaide selling centre with the remainder, predominantly of South East origin, going to Victorian selling centres. Imports of raw wool into South Australia in 1991–92 (one–third of imports from western Victoria and two–thirds from western New South Wales) exceeded the weight of wool exported interstate from South Australia by 16 per cent.

Prices

Prices paid for wool sold in South Australia tend to be on average less than prices realised in other States. This is attributable partly to the large proportion of medium to broad quality wools grown in South Australia and in western New South Wales.

Cattle

In comparison with other States, cattle grazing is not a major industry in South Australia. Of the cattle in Australia at 31 March 1992, 4 per cent of those used mainly for meat production and about 5 per cent of those for milk production were in South Australia. At 31 March 1992 the total number of cattle was 1,016,481.

Cattle Numbers : Statistical Divisions, at 31 March 1992 ('000)

Description	*Adelaide*	*Outer Adelaide*	*Yorke and Lower North*	*Murray Lands*	*South East*	*Eyre*	*Northern*
Cattle:							
For meat production ...	11.6	77.6	43.4	90.3	444.8	25.9	185.9
For milk production ...	5.8	57.0	4.2	41.4	27.5	0.3	1.0
Total	*17.4*	*134.6*	*47.5*	*131.6*	*472.2*	*26.1*	*186.9*

Cattle Numbers at 31 March

Description	*1990*	*1991*	*1992*
Cattle for meat production:			
Cows and heifers.....	440,919	442,670	434,933
Bulls *(a)*.....	20,716	25,805	24,422
Calves, under 1 year;			
Bull *(a)*	6,357	*(a)*	*(a)*
All other.....	222,018	219,837	238,672
Other cattle	140,211	168,337	181,310
Total.....	*830,221*	*856,649*	*879,337*
Cattle for milk production:			
Cows	88,705	87,268	88,814
Heifers, 1 year and over *(b)*	27,153	44,590	46,903
Bulls *(a)*.....	1,366	1,543	1,427
Calves, under 1 year;			
Bull *(a)*	392	*(a)*	*(a)*
Heifer *(b)*.....	20,199	*(b)*	*(b)*
House cows.....	1,051	*(c)*	*(c)*
Total.....	*138,866*	*133,401*	*137,144*
Total cattle	**969,087**	**990,050**	**1,016,481**

(a) Used or intended for service. From 1991, figures include bull calves with bulls.
(b) Heifer calves are included with heifers, 1 year and over, from 1991.
(c) From 1991, house cows are included with cows.

Cattle for meat production

The number of cattle for meat production at 31 March 1992 was 879,337. This was a 2.6 per cent increase on the previous year and continues the steady rate of increase.

In the northern pastoral areas, Shorthorns are the predominant breed while there are lesser numbers of Herefords. In the South East, Herefords and Shorthorns are the main breeds and there are substantial numbers of Aberdeen Angus, while near Adelaide where a number of studs are located, several breeds are well represented. In recent years several European breeds have been introduced, most notably the Charolais.

Cattle for milk production

There has been a steady decline in the total number of cattle for milk production over the last decade or so. However, the total number at 31 March 1992 was 137,144 (including house cows). This was a 2.8 per cent increase on the previous year.

Properties in South Australia on which dairying is the main activity are situated mainly in the areas where high rainfall or irrigation permits the growing of sown pastures. Many of the mixed farms in the better cereal growing areas carry herds used mainly for milk production.

Dairy produce

Milk

Total milk production in any one year is not known precisely. However, as details are known of two major components of total milk utilisation in South Australia, namely the amount consumed by factories in the production of milk, cheese, butter and other milk products and home consumption in the Metropolitan Milk Board area, an estimate can be made.

The following table shows the estimated production of whole milk and the quantity of this milk used for various purposes in 1991–92 and earlier seasons.

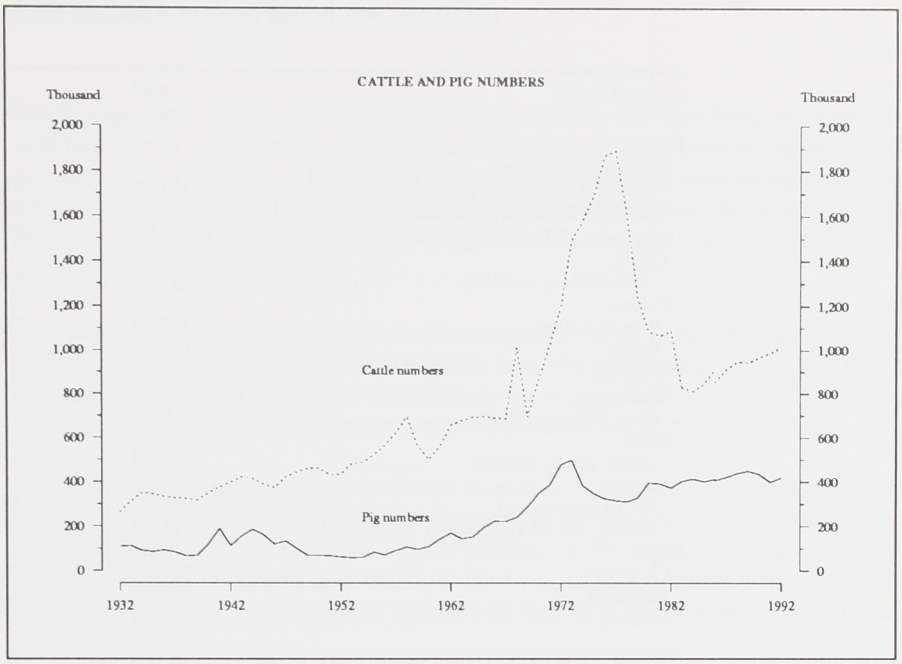
Production and Utilisation of Milk
('000 litres)

		Milk used for		
			Home consumption	
Year	*Total milk produced*	*Factory cheese (a)*	*Milk Board area*	*Outside Milk Board area*
1989–90	355,979	212,630	126,530	23,630
1990–91	366,016	229,540	122,604	31,596
1991–92	410,982	220,000	124,159	31,216

(a) Factory production accounts for virtually all cheese produced. *Source:* Australian Dairy Corporation.

Pigs

In past years pigs were kept in South Australia as a sideline on mixed farms or in conjunction with dairy cattle, but now most pig production comes from establishments specialising in pigs. At 31 March 1992 there were 420,041 pigs, of which approximately 58 per cent were in Outer Adelaide and the Murray Lands Divisions. The principal breeds in South Australia are Large White and Landrace. Specialised sire line breeds which include the American breeds Duroc and Hampshire are used more now.



Pig Numbers, at 31 March

Description	*1990*	*1991*	*1992*
Boars	3,461	3,288	3,575
Breeding sows and gilts	50,825	46,387	48,830
Other pigs	382,963	350,363	367,636
Total	*437,249*	*400,038*	*420,041*

Meat production and marketing

South Australia is a relatively small meat producer, providing approximately eight per cent of total Australian production. The following table shows the number of livestock slaughtered for human consumption (including exports) and the production of meat during the last six years. Slaughterings and meat production on rural establishments are included in these figures.

Livestock Slaughtered and Meat Produced

	Livestock slaughtered for human consumption			*Meat production (carcass weight)*			
Year	*Cattle and calves*	*Sheep and lambs*	*Pigs*	*Beef and veal*	*Mutton and lamb*	*Pigmeat*	*Total*
	'000	*'000*	*'000*	*tonnes*	*tonnes*	*tonnes*	*tonnes*
1986–87	462	4,009	643	91,478	76,350	40,761	208,590
1987–88	453	4,154	602	92,818	79,897	36,671	209,386
1988–89	408	3,961	659	88,143	78,362	40,364	206,868
1989–90	457	4,580	621	100,457	88,991	40,815	230,263
1990–91	398	4,786	599	87,619	97,472	38,644	223,734
1991–92	405	4,869	524	91,100	102,519	34,538	228,156

Livestock, Average Prices at Adelaide Market
(Dollars)

Class of stock	*1990*	*1991*	*1992*
Fat cattle:			
Bullocks and steers;			
Young, 120–160 kg medium	347.77	304.78	309.92
Steers, 250–300 kg medium	575.77	573.13	561.43
Bullocks, 300–350 kg medium	657.74	655.20	665.49
Cows;			
160–250 kg medium	421.75	407.40	410.42
Calves;			
Prime vealers	328.94	221.17	336.98
Good	180.67	160.53	186.80
Fat sheep:			
Wethers;			
Over 22 kg medium	8.01	7.35	14.11
Ewes;			
Under 22 kg medium	5.86	5.02	10.88
Lambs;			
16–19 kg medium	25.88	20.85	24.93
Young, 16–19 kg medium	27.80	21.87	26.56
Pigs:			
Choppers	234.87	235.14	230.96
Baconers	135.82	142.94	158.41
Porkers	87.25	101.63	107.88

Gross value

Gross value is the value placed on recorded production at the wholesale prices realised in principal markets. The following table shows for the past three years the gross value of livestock products, and livestock slaughterings and disposals.

Gross Value of Livestock Products and Livestock Slaughterings and Disposals

Particulars	*1989–90*	*1990–91*	*1991–92*
LIVESTOCK PRODUCTS ($'000)			
Wool	597,296	395,816	324,043
Whole milk intake by factories:			
Manufactured	39,576	45,530	45,933
Market sales *(a)*	59,283	64,449	67,246
Eggs	23,909	23,078	23,792
Honey and beeswax	3,283	2,788	3,614
Total livestock products	*723,348*	*531,662*	*464,627*
LIVESTOCK SLAUGHTERINGS AND DISPOSALS ($'000)			
Cattle and calves	177,270	149,815	153,682
Sheep and lambs	97,280	46,101	67,007
Pigs	73,121	82,232	63,672
Poultry	53,487	48,062	50,408
Total livestock slaughterings and disposals	*401,159*	*326,210*	*334,769*

(a) Market sales include white, flavoured, high and low fat milk, and UHT milk.

Other rural industries

Poultry farming

Poultry farming is a specialised and distinct industry and it is from the specialised hatcheries and chicken–raising establishments that the bulk of commercial production is obtained. The industry can be divided into two categories; the production of eggs, and the raising of poultry for meat. Chickens, scientifically bred for rapid weight gain and known as 'broilers', account for over 98 per cent of total poultry slaughtered.

The main production centres for both categories of this industry are located within an 80 kilometre radius of Adelaide, near the processing works and main consumption outlets. Particular concentrations of growers are at Murray Bridge and Gawler, with some broiler growers established in the Adelaide Hills.

The trend in the egg industry in South Australia is towards a reduction in the total number of poultry farms, but an increase in average flock size. Housing of birds for commercial purposes is largely planned on the intensive principle, with deep litter pens or single and multiple bird cage units. Laying stock consists mainly of a specially produced crossbreed between the White Leghorn and Australian breeds.

Poultry Numbers at 31 March
('000)

Particulars	*1990*	*1991*	*1992*
Hens and pullets for egg production	869	796	722
Other fowls and chickens	4,054	4,006	4,167
Other poultry *(a)*	27	32	35
Total	*4,950*	*4,834*	*4,924*

(a) Includes ducks, turkeys, quail, pheasants etc.

Egg production in 1991–92, as reported by the South Australian Agricultural Census, totalled approximately 12.5 million dozen. However, these figures do not take into account small producers and the movement of eggs interstate, which may represent a significant proportion of total egg production.

Broiler industry

The following table shows details of poultry slaughtered for human consumption for the last five years.

Poultry Slaughtered for Human Consumption[(a)]

Year	*Chickens (broilers, fryers or roasters)*	*Hens, stags and others*	*Total*
	NUMBER SLAUGHTERED ('000)		
1987–88	28,641	389	29,031
1988–89	25,548	458	26,008
1989–90	27,198	562	27,760
1990–91	23,730	408	24,139
1991–92	26,416	486	26,902

Poultry Slaughtered for Human Consumption[a] *(continued)*

Year	*Chickens (broilers, fryers or roasters)*	*Hens, stags and others*	*Total*
	DRESSED WEIGHT OF POULTRY SLAUGHTERED (tonnes)(*b*)		
1987–88	34,907	1,059	35,966
1988–89	32,946	1,123	34,069
1989–90	35,248	1,502	36,750
1990–91	31,945	1,262	33,207
1991–92	36,978	1,525	38,503

(a) Excludes geese slaughtered. *(b)* Dressed weight of whole birds, pieces and giblets as reported by producers.

Broilers are specially bred meat strain birds of either sex, that are slaughtered between eight and ten weeks of age at a live weight of approximately 1.5 kg. This rapid growth and efficient conversion of feed to meat has been achieved by extensive breeding programmes; the use of specially prepared poultry feeds high in protein and energy value; growth promotion and disease control drugs; and broiler houses, with controlled temperature, ventilation and light, conducive to fast growth.

Beekeeping

Beekeeping in South Australia is a small industry – in 1991–92 there were 84 beekeepers with forty or more hives. Most commercial apiarists operate on a migratory basis, following the flowering of the various species of honey flora. The production of honey and beeswax fluctuates considerably from year to year, depending upon seasonal conditions.

Landcare

Landcare, established in South Australia in 1989, continues to grow steadily with over 200 Landcare groups throughout the State. Groups undertake a range of activities from the adoption of sustainable farming practices to tree planting, nature conservation, water quality monitoring and erosion control. Support is provided by State Government agencies.

The Commonwealth Government through the National Landcare Program provides support for land and water management, vegetation establishment, corridor development, habitat retention and management for wildlife.

Soil Conservation Boards operate throughout the State. The Murray Mallee and West Broughton Soil Conservation Boards final District Plan identifies sustainable management practices for the land types which occur in their District. Each Plan was prepared with public consultation. Other Boards have released draft district plans for public comment and consultation. All Boards will have prepared a draft District Plan by 1995 which will provide the basis for the identification and adoption of sustainable farming practices throughout the State. These plans are prepared by land holders for land holders.

In urban areas, awareness of the importance of land and water care is increasing, with groups participating in water quality monitoring, and catchment management, including litter collection and stream revegetation. Other groups are becoming interested in Coast care. Schools are participating in the Landcare Program, including monitoring salinity levels in water supplies through Saltwatch, monitoring frogs and their habitat in Frogwatch and gaining a better understanding of the soil through Wormwatch.

10.2 FORESTRY

There are an estimated six million hectares of land classified as wooded in South Australia, but much of this is too small or scattered to be of current economic value for wood production or is better retained in its present form for environmental protection. Some 780,000 hectares carry forest or forest woodland, a minor part of which is still used for fencing or firewood materials. Many of the forested or wooded areas are of considerable value for soil conservation, watershed protection, shelter, shade and conservation of indigenous plants and animals. The plantation forest estate is of particular economic significance in South Australia, which because of climatic factors is very deficient in natural timber resources.

Of the State's forest reserve totalling 127,084 hectares, at 30 June 1993, 74,265 hectares is currently under pine plantation (mainly *Pinus radiata*). It is estimated an additional 27,000 hectares are under plantation by private forestry organisations and individuals.

Indigenous forests

The natural forests of South Australia consist of eucalypt hardwoods restricted principally to the Mount Lofty Ranges, the lower Flinders Ranges, the southern portion of Eyre Peninsula, and the South East and these are managed primarily for conservation purposes.

Since the 1983 bushfire damage of forest plantations in the South Eastern and Central regions, an extensive replanting program has been undertaken and was completed in 1993. Salvaged logs that were placed in Lake Bonney for storage have been removed and tests have shown that retrieved logs suffered no significant deterioration in strength or durability.

The majority of the planted forest is in the Lower South East. The 625 mm rainfall line roughly divides the South East in two; the Lower South East, with an annual rainfall in excess of 625 mm is quite suitable for commercial forestry, but the Upper South East is not.

State forests

State forests were administered by Woods and Forests under the auspices of Primary Industries (SA) which was responsible for the establishment, maintenance and utilisation of State forests, including the management of forest reserves and operation of mills for processing timber produced by those forests. The Forest Reserves are organised into Districts and are under the charge of professional foresters. From 1 July 1993 following a government reorganisation of the former Woods and Forests Department, the forestry aspect of the agency was transferred to the newly formed Primary Industries (SA) department and the timber products and manufacturing market area was formed into a fully

government–owned company called Forwood Products Pty Ltd. This company now operates the three sawmills, wood preservation plant and timber engineering plant of the former agency.

State Forests
(Hectares)

Location	Planted during 1992			Plantations at 30 June 1993		
	Softwoods			Softwoods		
	Pinus radiata	Other Pinus	Hard–woods	Pinus radiata	Other Pinus	Hard–woods
Northern Region:						
Bundaleer	–	–	3.2	1,296.7	19.9	354.6
Wirrabara	27.0	–	–	1,926.5	52.4	44.0
Other forests	–	–	–	–	–	146.6
Total Northern	*27.0*	–	*3.2*	*3,223.2*	*72.3*	*545.2*
Central Region:						
Mount Crawford	99.9	–	48.6	3,892.9	227.0	41.7
Kuitpo	62.2	0.3	–	1,912.3	243.4	145.6
Second Valley	20.0	–	–	2,249.3	160.7	13.5
Other forests	–	–	–	748.7	21.3	123.3
Total Central	*182.1*	*0.3*	*48.6*	*8,803.2*	*652.4*	*324.1*
South Eastern Region:						
Penola	856.2	–	3.6	12,821.0	504.5	52.5
Comaum	–	–	–	2,955.4	282.3	11.4
Cave Range	–	–	–	206.9	105.2	–
Mount Burr	720.8	–	–	15,923.1	684.6	125.7
Noolook	77.8	–	–	4,751.8	4.0	–
Mount Gambier	63.2	–	14.4	9,270.0	244.9	69.9
Myora	171.1	–	12.3	13,137.1	394.9	52.1
Total South Eastern	*1,889.1*	–	*30.3*	*59,065.3*	*2,220.4*	*311.6*
Waterworks reserves	–	–	–	901.2	121.2	3.5
Total State forests	**2,098.2**	**0.3**	**82.1**	**71,992.9**	**3,066.3**	**1,184.4**

Source: Primary Industries (SA) Forestry.

Production

Log production is met from final felling and thinning operations, and planned forest management ensures that the amount of timber cut each year does not exceed new growth. The logging system used is from stump direct to mill. Primary Industries (SA) also supplies logs to private processing plants in South Australia.

Forwood Products, CSR–Softwoods and SEAS–Sapfor Ltd are major wood processors based in the south east of the State. Forwood Products comprises three sawmills in the South East at Mount Gambier, Nangwarry and Mount Burr, a panel and plywood plant at Nangwarry and a specialist furniture component factory at Mount Gambier. CSR–Softwoods operates the only particle board plants in South Australia and its three sawmills at Kuitpo, Mount Gambier and Jamestown have been progressively updated. SEAS–Sapfor operates mills at Tarpeena and Kalangadoo.

Forest Log Production[(a)]
(Cubic metres)

Year	*Softwood*
1988–89	763,173
1989–90	710,487
1990–91	685,348
1991–92	800,683
1992–93	866,052

(a) Source: Primary Industries (SA) Forestry. Does not include production by the larger private forest growers.

Production of Sawn Wood[(a)]

Year	*Cubic metres*	*Proportion of Australian total (per cent)*
1988–89	292,686	8.8
1989–90	228,156	7.3
1990–91	240,193	8.7
1991–92	271,800	9.3
1992–93	317,100	10.2

(a) Source: Australian Bureau of Agricultural and Resource Economics. Includes sawn equivalent of plywood and veneer, but excludes railway sleepers.

Total log production from State forests for Departmental sawmills and private industry deliveries includes logs for sawlog, preservation, peeler log and pulpwood.

Employment

The number of employees directly employed by Woods & Forests was 1,168 at 30 June 1993, and included 480 people employed directly in milling activities.

Research

The virtual dependence of the South Australian forestry industry on a single species necessitates continued research into the maintenance and improvement of *Pinus radiata* resources, as well as into forestry in general.

Primary Industries (SA) Forestry maintains its own research facilities and works very closely with the South Australian Regional Station of the Division of Forest Research of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) at Mount Gambier. Certain aspects of forestry research are also undertaken by the Soils Division of CSIRO, the Waite Agricultural Research Institute, the University of Adelaide, the Flinders University and the Department of Forestry of the Australian National University.

Joint research is being carried out into tree breeding through the Southern Tree Breeding Association whose South Australian members include the Primary Industries (SA) Forestry, CSR–Softwoods and SEAS–Sapfor Ltd.

The Association is producing seed of improved quality to grow seedlings for planting in radiata pine forest areas.

Research activities aimed at an expansion of forestry production include the development of fertiliser use, both to stimulate growth and to bring into production land previously considered unsuitable, and the improvement of planting stock through selective breeding. Silvicultural research is concerned with the maintenance of soil fertility and with combating various diseases and pests. Permanent sample plots are maintained in Departmental forests for research into various aspects of forest yield and management.

Primary Industries (SA) provides an advisory service in arboriculture and distributes, through its outlets at Murray Bridge, Belair, Cavan, Berri and Bundaleer, a wide variety of Australian trees and shrubs suitable for planting in various climatic and soil conditions.

Forest protection

Primary Industries (SA) Forestry has developed an extensive forest protection network, including the development of specialised off–road 4–wheel drive fire fighting and support vehicles. The organisation's forest fire fighting units are registered as 12 Country Fire Service brigades and form part of local groups.

The clearing of undergrowth, the maintenance of fire–breaks, the staffing of observation towers and the constant readiness of fire fighting units are all an integral part of forestry practice.

Other protective measures include herbicide application to prevent plant disorders, measures to control insect pests in the forest, and the eradication of the various weeds and pests which threaten young plants.

A large outbreak of the *Sirex* wood wasp occurred in forest regions throughout the South East following the summer of 1986–87, however, this is currently under control after the Woods & Forests Department undertook the world's largest inoculation program to combat the destructive *Sirex*. More than 120,000 trees were inoculated with a nematode which sterilises *Sirex* eggs.

10.3 FISHERIES

Commercial fishing is undertaken along the entire South Australian coastline. In the sheltered waters of the Gulfs and the West Coast bays, operators take prawns or various marine scale fish species, while in offshore waters southern bluefin tuna and shark are sought.

Rock lobster is taken along the more exposed parts of the coast, while abalone is dived for in most areas. A small quantity of freshwater fish is caught in the River Murray and associated lakes.

The most commercially valuable species are rock lobster and prawns, with tuna, abalone, shark and whiting also making significant contributions. The general marine scale fishery supports the greatest number of fishermen, both recreational and commercial.

The total value of fisheries produce landed commercially in South Australia in 1991–92 was $133.4 million.

There were 1,132 licensed fishermen operating in South Australian waters at 30 June 1992. The number of licence holders in each of the fisheries was; general marine 662, rock lobster 277, prawn 52, Lakes and Coorong 39, Reach (River Murray) 41, abalone 34, and miscellaneous 27. There are approximately 50 Commonwealth licensed fishermen fishing for tuna in South Australia. In addition, there is an average of one employee fisherman engaged in the industry for each licensed fishing operation, although the number of employees on each vessel varies according to the fishing operation.

Administration

The exploitation of fish resources adjacent to South Australia is controlled by three Acts, the South Australian *Fisheries Act 1982*, the Commonwealth *Fisheries Act 1952* and the *Continental Shelf (Living and Natural Resources) Act 1968* (Cwlth). The *Fisheries Act 1982* was proclaimed and regulations gazetted in June 1984.

Under the State Act, which is administered by the Department of Fisheries, provision is made for the licensing of fishermen and the registration of boats and gear. Control of fishing activity is maintained by licensing, zoning and seasonal closures, the establishment of size limits, bag limits and closed areas, the regulation of amount and type of gear, the prohibition of the use of explosive or noxious substances in any waters and the establishment of aquatic reserves. Controls of this nature are considered necessary for the orderly and efficient use of fish resources, which are in effect 'common property' resources.

Finfish

The major marine species of finfish taken in South Australian waters are tuna, shark, oceanjacket, Australian salmon, whiting, garfish and snapper.

Finfish : Production by Major Species[(a)]
('000 kg)

Species	*1989–90*	*1990–91*	*1991–92*
Marine:			
Australian salmon	411	513	624
Garfish	516	453	514
Leatherjacket	77	158	140
Mullet	522	381	332
Mulloway	49	50	53
Oceanjacket	917	949	1,007
Orange roughy	2,888	983	218
Tommy ruff	340	309	363
Shark	2,096	2,301	2,181
Snook	104	99	100
Snapper	423	457	437
Tuna	4,228	2,565	1,786
Whiting (King George)	634	741	797
Total (incl. other)	*15,214*	*13,528*	*12,996*
Freshwater:			
Golden perch (Callop)	139	164	157
Murray cod	4	–	–
Bony bream	1,172	977	1,129
European carp	502	657	1,154
Total (incl. other)	*1,877*	*1,835*	*2,473*
Total finfish production	**17,091**	**15,363**	**15,469**

(a) Includes catches made in the new Great Australian Bight and South East Trawl Fisheries.
Source: South Australian Department of Fisheries.

Tuna are taken in the waters west and south of Eyre Peninsula and Kangaroo Island. Occasional catches are taken beyond the continental shelf. The use of spotting aircraft has increased the efficiency of fishing operations. Traditionally most tuna have been landed at Port Lincoln or Streaky Bay although in recent years a significant proportion of the catch has been off–loaded onto Japanese 'carrier' freezer vessels for direct shipment to the Japanese markets. For 1991–92 the tuna fishery operated with an Australian quota of 5,265 tonnes.

Shark fishing extends along the entire coastline. The main ports of landing are Port Lincoln, Robe, Thevenard/Ceduna, Victor Harbor, Port Adelaide and the south–east rock lobster ports. The two most important species, namely school and gummy sharks, are mainly taken with large mesh gill nets and, to a lesser extent, with long–lines. The Commonwealth Government has prepared a management plan for the southern shark fishery to control the total effort in the fishery.

Operators using purse–seine nets take Australian salmon in waters adjacent to the moderately exposed coastline of southern Yorke and Eyre Peninsulas, Kangaroo Island and the West Coast. A total catch quota of 1,126 tonnes for South Australia has been imposed as emigrants from the South Australian stock are an important component of the Western Australian fishery. The main species of whiting taken is King George whiting which is captured commercially in Spencer Gulf and the West Coast bays. Of the other species garfish, mulloway, black bream and snapper are regarded highly as table fish. Mulloway and black bream are netted mainly in the Coorong and waters adjacent to the River Murray Mouth area.

Snapper are mainly taken by hand–line throughout State waters. In recent years the catches being made by long–lines have increased.

Finfish : Gross Value of Production by Major Species[(a)]
($'000)

Species	*1989–90*	*1990–91*	*1991–92*
Orange roughy	6,844	1,230	435
Tuna *(b)*	17,584	12,395	10,070
Whiting	4,173	4,355	5,468
Snapper	1,648	1,745	1,770
Garfish	1,402	1,315	1,645
Australian salmon	488	502	693
Shark	5,066	5,822	5,828
Total (incl. other)	*45,621*	*34,107*	*33,717*

(a) Includes catches made in the new Great Australian Bight and South East Trawl Fisheries. *(b)* Price includes a component for value added.
Source: South Australian Department of Fisheries.

The River Murray, Lakes area and Coorong are the only commercial sources of fresh water fish in the State because of the general lack of permanent streams and lakes. The River Murray has been sectioned into 'reaches' and 'reserves' for fishing purposes and each commercial river fisherman is issued with a permit to fish a separate reach.

Crustaceans

Prawn trawling is undertaken in Spencer Gulf and on the West Coast of the State. Management of the prawn fisheries has been greatly enhanced by the adoption of permanent and seasonal closures designed to protect small and reproducing prawns. This in turn maximises the value of the catch by directing fishing to periods when prawns are larger and of higher quality.

Prawn Production

Particulars		*1989–90*	*1990–91*	*1991–92*
Estimated gross weight	'000 kg	1,970	2,085	2,155
Value	$'000	22,747	21,717	19,653

Source: South Australian Department of Fisheries.

Pots by which southern rock lobster are taken are positioned from the shore to the edge of the continental shelf. The south–east coast between Kingston and the Victoria border is the main fishing area. Good catches are also taken from grounds around Kangaroo Island, near the Althorpe Islands and Port Lincoln, and along the West Coast.

Rock Lobster Production

Particulars		*1989–90*	*1990–91*	*1991–92*
Estimated gross weight	'000 kg	2,525	2,666	3,162
Value	$'000	36,488	44,931	57,752

Source: South Australian Department of Fisheries.

To prevent over exploitation, almost all South Australian fisheries are 'limited entry' fisheries with constraints being placed on the number and size of vessels that may fish and the type or number of units of gear that may be used.

Although prawns and rock lobsters are the principal species of crustaceans fished in South Australia, there has been a recent increase in commercial fishing for blue crabs and sand crabs.

Molluscs

Abalone is by far the most important mollusc taken in South Australia and is found in greatest numbers at depths of 12 to 30 metres on the extensive reef substrata off the shores of western Eyre Peninsula. Smaller numbers are taken around Kangaroo Island and off the south–east coast. The two species exploited are greenlip and blacklip.

The abalone fishery is also subject to licence limitation with each diver required to have an authority to take abalone on his commercial fishing licence.

Abalone Production

Particulars		*1989–90*	*1990–91*	*1991–92*
Gross (in shell) weight	'000 kg	959	863	885
Value	$'000	16,693	14,008	15,095

Source: South Australian Department of Fisheries.

Oyster production is growing. Of the 77 approved leases, approximately half are fully commercial. Gross value of sales was approximately $3,000,000.

Other molluscs taken in South Australian waters include squid (valued at $1,180,211 in 1991–92), octopus ($1,038,264), and scallops ($335,221).

Marketing and processing

Marketing and processing arrangements vary according to the species. Traditionally, most of the tuna landed in South Australia is canned (not necessarily in South Australia) for domestic consumption. With the introduction of Individual Transferable Quotas and subsequent restructuring of the industry, the higher valued *sashimi* (raw fish) market in Japan is being examined. Southern rock lobster are tailed and frozen for export at most of the main ports, but some are cooked for local consumption. Some prawns are cooked and sold locally but most are frozen and exported. Abalone are either canned or frozen for export. Sharks are gutted and headed at sea and are frozen at the port of landing for interstate markets. Other fish are generally iced for dispatch to the Adelaide market or are scaled, filleted and frozen for general distribution. A proportion of the prime species landed in South Australia are sold for Australian east coast markets.

Research

Continuing research is important for effective fisheries management. The State Fisheries Department conducts rock lobster, prawn, Australian salmon, abalone, freshwater fish, whiting, snapper and oyster research programs including tagging, stock sampling, and market measuring. The Department also undertakes research into aspects of its fisheries management programs.

Conservation

The State Department of Fisheries has pioneered, in Australia, the concept of marine national parks and has created thirteen aquatic reserves with a total area of 14,971 hectares. Seal colonies, mangrove communities and areas of scientific and educational interest have been protected. Mangrove communities and allied samphire flats have received particular attention because of their recognised contribution to the productivity of the near–shore marine environment. All mangroves in South Australia are fully protected.

Chapter 11

MANUFACTURING

Manufacturing industry statistics

For the year ended June 1969, the Censuses of Manufacturing and Electricity and Gas Establishments were conducted for the first time on an integrated basis with Censuses of Mining, Retail Trade and Selected Services, and Wholesale Trade. As well as this change in the method of obtaining information on economic activities, different criteria were used to define manufacturing and this resulted in a significant fall in the number of establishments. A more detailed explanation of these changes was included on pages 440–4 of the *South Australian Year Book 1972*.

Also, from 1974–75 to 1989–90 the statistics excluded single establishment enterprises employing fewer than four persons. The contribution of these businesses to statistical aggregates other than the number of establishments is only marginal. These businesses are included in the statistics for 1990–91 which relate to all manufacturing establishments.

The unit for which detailed statistics are reported in the Manufacturing Census is the establishment. Before the 1988–89 Census, this unit covered, in general, all the operations carried on under the ownership of one enterprise (business) at a single physical location.

The definitions were revised for the 1988–89 Census, with the establishment now generally delimited on the basis of availability of accounting data rather than in terms of a location. In general, an establishment covers all operations at a physical location, but may consist of a group of locations provided they are within the same State or Territory. The majority of establishments operate at one location only. Statistics in the tables below are for either establishments or locations.

Prior to the 1987–88 Census, full–scale Manufacturing Censuses were conducted for each year with the exception of 1970–71 and 1985–86. These full–scale censuses are now conducted on a triennial basis, with small–scale censuses being conducted in each of the intervening years. The last full–scale census was conducted in respect of the 1989–90 year. For the small–scale censuses, businesses only provide details relating to employment at end of June, wages and salaries paid and turnover.

Structure and location

To a considerable extent, industrialisation since the 1939–45 War has evolved around three major industrial groups. The motor vehicle, the electrical goods and the household appliance industries together with their peripheral suppliers of components and services, have accounted for much of the post–war expansion. These industries are located in, or near Adelaide. In fact, the tendency for manufacturing industries, particularly those supplying consumer goods, to congregate near their market has resulted in a heavy concentration of South Australian secondary industries in or near Adelaide.

The following tables show this concentration of manufacturing activity in the Adelaide Statistical Division (ASD).

Manufacturing Locations : Summary of Operations, 1990–91

Item	Unit	Adelaide Statistical Division	South Australia	ASD as percentage of SA
Locations at 30 June	Number	2,560	3,236	79
Employment at end of June	Number	74,566	94,224	79
Wages and salaries	$m	2,015.1	2,548.7	79
Turnover	$m	12,882.6	16,021.8	80

Generally, industrial plants outside the Adelaide Statistical Division are located near the sources of supply of raw materials. These include the sawmills and paper pulp industries of the South East, the fruit processing plants of the Riverland, the wineries and distilleries of the Barossa Valley and the Riverland and various dairy produce, meat slaughtering, fish processing and cement manufacturing plants.

Manufacturing Locations : Summary of Manufacturing Operations by Statistical Division, 1990–91

Statistical Division	Locations at 30 June	Employment at end of June	Wages and salaries	Turnover
	number	number	$m	$m
Adelaide	2,560	74,566	2,015.1	12,882.6
Outer Adelaide	215	3,894	85.2	493.1
Yorke and Lower North	70	931	14.6	76.9
Murray Lands	122	3,292	79.1	622.2
South East	126	4,654	133.9	727.9
Eyre	58	705	11.5	81.4
Northern	85	6,182	209.2	1,137.7
Total State	*3,236*	*94,224*	*2,548.7*	*16,021.8*

The two most important manufacturing undertakings beyond the vicinity of Adelaide are the iron and steel complex at Whyalla and the silver–lead–zinc smelters at Port Pirie. The sites of these undertakings together with the power station at Port Augusta are related to the location of mineral resources.

A summary of manufacturing operations by industry subdivision within the Adelaide Statistical Division is detailed below and the distribution of activity between this Division and the Rest of the State can be seen by comparing this and the subsequent table.

Manufacturing Locations : Summary of Operations by Industry Subdivision, Adelaide Statistical Division, 1990–91

Industry Subdivision	*Locations at 30 June*	*Employment at end of June*	*Wages and salaries*	*Turnover*
	number	*number*	*$m*	*$m*
Food, beverages and tobacco	220	8,939	220.2	1,598.3
Textiles	60	2,172	55.9	359.7
Clothing and footwear	124	3,440	72.9	285.4
Wood, wood products and furniture	445	4,893	110.2	478.2
Paper, paper products, printing and publishing	253	5,524	157.6	631.7
Chemical, petroleum and coal products	61	2,466	81.0	1,355.1
Non–metallic mineral products	107	2,718	89.0	502.5
Basic metal products	51	2,328	59.9	424.0
Fabricated metal products	420	6,549	161.6	736.6
Transport equipment	148	15,651	469.2	4,112.1
Other machinery and equipment	400	12,746	355.4	1,559.1
Miscellaneous manufacturing	271	7,140	182.3	840.0
Total manufacturing	*2,560*	*74,566*	*2,015.1*	*12,882.6*

The number of manufacturing locations in South Australia decreased from 3,279 in 1989–90 to 3,236 in 1990–91, a decrease of 1.3 per cent. Employment at the end of June 1991 was 94,224, a decrease of 4.4 per cent from the June 1990 figure of 98,519. The industry subdivisions wood, wood products and furniture, non–metallic mineral products and fabricated metal products recorded the largest percentage decreases in employment.

Manufacturing Locations : Summary of Operations by Industry Subdivision, 1990–91

Industry Subdivision	*Locations at 30 June*	*Employment at end of June*	*Wages and salaries*	*Turnover*
	number	*number*	*$m*	*$m*
Food, beverages and tobacco	423	16,235	379.8	2,822.6
Textiles	70	2,458	64.1	392.4
Clothing and footwear	134	3,732	78.1	317.2
Wood, wood products and furniture	543	7,110	167.7	726.8
Paper, paper products, printing and publishing	304	7,207	213.9	867.1
Chemical, petroleum and coal products	74	2,705	87.9	1,417.9
Non–metallic mineral products	153	3,118	98.9	549.8
Basic metal products	63	7,448	240.8	1,462.3
Fabricated metal products	524	7,580	188.3	847.7
Transport equipment	178	15,902	474.4	4,136.6
Other machinery and equipment	474	13,486	371.0	1,633.5
Miscellaneous manufacturing	296	7,243	183.7	847.9
Total manufacturing	*3,236*	*94,224*	*2,548.7*	*16,021.8*

The importance of the manufacturing industry in South Australia relative to Australia as a whole can be gauged from the following comparison.

Manufacturing Establishments : Summary of Operations
South Australia and Australia, 1990–91

Item	Unit	South Australia	Australia	South Australia as a percentage of Australia
Establishments at 30 June. . . .	Number	3,184	40,654	7.8
Employment at end of June . .	'000	94.3	961.4	9.8
Wages and salaries	$m	2,551.6	27,784.8	9.2
Turnover	$m	16,035.5	171,931.7	9.3

Although there were 3,184 establishments operating at 30 June 1991 only 169 or 5.3 per cent had an employment of 100 persons or more, while 2,496 establishments, or 78.4 per cent of the total, employed less than 20 persons. The 23 largest establishments employed 27,028 persons or 28.6 per cent of the total.

In the following table manufacturing establishments are grouped according to the number of persons employed.

Manufacturing Establishments : Selected Variables by Size of Establishment, 30 June 1991

Employment size group	Establishments at 30 June	Employment at end of June	Wages and salaries	Turnover
	number	number	$m	$m
Fewer than 20	2,496	15,129	308.0	1,552.8
20 but fewer than 50	380	11,327	282.7	1,473.9
50 but fewer than 100	139	9,681	256.4	1,484.6
100 but fewer than 200	78	10,419	294.0	1,965.4
200 but fewer than 500	68	20,765	583.2	3,486.1
500 or more	23	27,028	819.1	6,043.7

Individual industries

In this section details are given of major South Australian secondary industries. However, in order to maintain confidentiality of details for individual businesses, statistics relating to a number of important industries are not published. The classification used is based on the 1983 edition of the Australian Standard Industrial Classification (ASIC).

Meat

Most of the abattoirs in South Australia are located in country areas. Details of country butchers who slaughter livestock mainly for sale in their own retail shops are not included in the following table.

Meat

(Note: Includes single establishment enterprises with fewer than four persons employed (except small goods or poultry) from 1990–91.)

Year	Establishments at 30 June	Employment at end of June	Wages and salaries	Turnover
	number	number	$m	$m
1987–88	38	2,565	53.4	331.8
1988–89	40	2,759	55.4	382.6
1989–90	43	3,375	75.9	449.8
1990–91	39	3,051	77.5	427.5

Wine and brandy

South Australia is the leading State in wine and brandy production. For 1990–91, 40 per cent of Australian establishments classified to this industry were located in this State and their contribution to national totals was 56 per cent of employment, 55 per cent of wages and salaries and 57 per cent of turnover.

Wine and Brandy

(Note: Includes single establishment enterprises with fewer than four persons employed from 1990–91.)

Year	Establishments at 30 June	Employment at end of June	Wages and salaries	Turnover
	number	number	$m	$m
1987–88	76	2,575	54.2	425.5
1988–89	83	2,696	60.7	508.6
1989–90	72	2,438	63.3	494.4
1990–91	86	2,894	65.0	481.0

Wood and wood products

The major activities in this sector of manufacturing are log sawmilling, resawn and dressed timber and joinery and wooden structural fittings industries.

Wood and Wood Products

(Note: Includes single establishment enterprises with fewer than four persons employed from 1990–91.)

Year	Establishments at 30 June	Employment at end of June	Wages and salaries	Turnover
	number	number	$m	$m
1987–88	180	4,068	79.8	396.3
1988–89	208	4,863	100.6	504.5
1989–90	175	4,409	101.1	451.7
1990–91	254	4,113	103.4	473.1

Printing and allied industries

There were two large establishments in 1990–91 producing daily newspapers in Adelaide. Newspaper printing offices are also located in most large towns, and a number of these produce newspapers for more than one locality. Particulars of general printing establishments, including the activities of the Stateprint Division of the Department of State Services, are also incorporated in the following table.

Printing and Allied Industries
(Note: Includes single establishment enterprises with fewer than four persons employed from 1990–91.)

Year	Establishments at 30 June	Employment at end of June	Wages and salaries	Turnover
	number	number	$m	$m
1987–88	208	5,547	118.6	481.1
1988–89	223	5,893	138.7	538.8
1989–90	212	5,603	146.4	570.2
1990–91	283	5,641	155.0	572.6

Cement and concrete products

Only one firm produces cement in South Australia, its two manufacturing plants being at Birkenhead and Angaston. The Angaston plant, based on the limestone deposits, is an example of a manufacturing location being established near the source of the raw material.

Cement and Concrete Products
(Note: Includes single establishment enterprises with fewer than four persons employed from 1990–91.)

Year	Establishments at 30 June	Employment at end of June	Wages and salaries	Turnover
	number	number	$m	$m
1987–88	101	2,033	50.5	302.8
1988–89	72	2,153	53.5	342.7
1989–90	68	2,120	63.8	393.6
1990–91	71	1,631	52.1	338.2

Basic iron and steel

In 1941 a blast furnace was installed at Whyalla to utilise iron ore from the Middleback Ranges. This ore is transported by rail a distance of fifty–five kilometres to Whyalla. Before 1965 Whyalla was the major source of Australia's foundry iron but this changed in 1965 when the Basic Oxygen Steelmaking plant began producing steel.

The main items of production are structural steel sections (such as girders and beams) and rails. In 1990–91, the 38 establishments in South Australia, classified to this industry group, reported total employment at June 1991 of 5,376; wages and salaries $172.2 million and turnover $865.1 million.

Motor vehicles and parts

The largest single industry in South Australia and a major contributor to industrial growth since 1945 is the motor vehicle industry. However, as there are only a few firms engaged in motor vehicle production, confidentiality reasons prevent publication of detailed figures.

Appliances and electrical equipment

For many years South Australia has been one of the leading States in the production of the larger household appliances, including refrigerators, washing machines, cooking stoves and ranges. These items constitute a significant part of the total activity shown in the next table. Also represented are manufacturers of radio and television components, water–heating systems, batteries and other electrical machinery and equipment.

This group of industries is the second most important in the State and in 1990–91 accounted for 8.7 per cent of total manufacturing employment in South Australia.

Appliances and Electrical Equipment
(Note: Includes single establishment enterprises with fewer than four persons employed from 1990–91.)

Year	*Establish-ments at 30 June*	*Employ-ment at end of June*	*Wages and salaries*	*Turnover*
	number	*number*	*$m*	*$m*
1987–88	96	8,269	163.0	742.3
1988–89	113	9,215	195.3	897.9
1989–90	102	7,660	181.5	892.2
1990–91	130	8,190	225.4	1,106.6

Environmental protection

The 1990–91 Manufacturing Census included three questions relating to environmental protection. For each of the environmental issues raised, the percentage contribution to total turnover was significantly higher than the straight proportion of total establishments. This indicates that larger establishments constitute a relatively high proportion of establishments involved in environmental protection activities.

In all, 29 per cent of manufacturing establishments reported being involved in recycling activities. These establishments contributed 65 per cent of total manufacturing turnover reflecting the higher incidence of recycling activity among the larger establishments. The incidence of manufacturing establishments licensed under Federal or State Acts relating to environmental protection was quite low with only 2 per cent of establishments reporting being licensed. These establishments contributed 4 per cent of total manufacturing turnover.

A relatively high percentage (58 per cent) of manufacturing establishments reported use of special equipment or processes designed for the protection of the environment and these establishments contributed 86 per cent of the turnover.

Further references

Additional information may be found in the following ABS publications:

8202.0 *Manufacturing Industry, Summary of Operations, Australia*
8211.0 *Constant Price Estimates of Manufacturing Production, Australia*
8221.0 *Manufacturing Industry, Australia*
8221.4 *Manufacturing Industry, South Australia*
8365.0 *Manufacturing Production, Australia: Principal Commodities Produced*

Chapter 12

MINING AND ENERGY

12.1 MINING

South Australia has a well developed mineral industry and in recent years crude oil and natural gas have surpassed coal and iron ore as the major products. The State also has important resources of industrial minerals which make up a significant proportion of the total annual value of mineral production.

The *Mining Act 1971* reserves all minerals to the Crown and regulates and controls all mining operations in South Australia.

The state and conditions of the mine, machinery, ventilation, and all other matters relating to the safety, health and well–being of the employees and general public are regulated by the *Mines and Works Inspection Act 1920*. The *Petroleum Act 1940*, *Petroleum (Submerged Lands) Act 1982*, *Cooper Basin (Ratification) Act 1975*, *Stony Point (Liquids Project) Ratification Act 1981* and the *Petroleum Shortages Act 1980* provide for the control of petroleum exploration and the production, conservation and distribution of petroleum by pipeline. The administration of these Acts is the responsibility of the Minister of Mines and Energy and the Director–General, Department of Mines and Energy.

Mining claims leases and licences

The granting of leases and licences and the pegging of new claims is governed by the *Mining Act 1971*. A total of 273 private mines were current at 30 June 1993. Mineral royalties received by the Department of Mines and Energy during 1992–93 amounted to $70.4 million.

The following table shows tenements held under the *Mining Act 1971* and the *Petroleum Act 1940* for the last three years.

Tenements Held Under Mining and Petroleum Acts

	At 30 June		
Particulars	*1991*	*1992*	*1993*
Mineral claims	113	108	118
Precious stones claims	2,517	2,208	2,014
Leases	1,620	1,612	1,606
Exploration licences	130	130	127
Petroleum exploration and production licences and permits	86	93	96

Minerals resumed

The mineral rights on private land were resumed by the Crown in July 1972 so that all minerals are the property of the Crown.

A royalty of 2.5 per cent (5 per cent for extractive minerals) of the value of the minerals, realised upon their sale, is payable to the Minister of Mines and Energy on all minerals (except precious stones) recovered and sold or used for commercial purposes. No royalty is payable on precious stones.

Extractive minerals

Extractive minerals are defined as sand, gravel, stone, shell, shale or clay but this does not include any such minerals that are mined for a prescribed purpose, nor fire–clay, bentonite or kaolin.

The royalties collected from the mining of extractive minerals are paid into the Extractive Areas Rehabilitation Fund to be used in rehabilitating land disturbed by mining operations. The Fund may also be used for research into methods of mining engineering and practice with a view to reducing environmental damage or impairment.

General conditions

A current miners right or, in the case of precious stones, a precious stones prospecting permit must be held by every prospector to authorise the pegging of the appropriate class of claim.

At least three weeks notice of entry for prospecting or mining purposes must be given to the landholder if the land is freehold or held on perpetual lease. Three weeks notice must also be given to any landholder before 'declared equipment' can be used on his land. In either case the landholder may lodge an objection with the Warden's Court.

A claim (other than a precious stones claim) has a maximum term of twelve months, is not transferable and must be converted to a lease before minerals can be removed for sale or used for commercial purposes.

Exploration licences have a maximum term of five years and a maximum area of 2,500 square kilometres and are subject to the terms agreed. Twenty–eight days notice must be given in the *South Australian Government Gazette* before an exploration licence is granted.

Mineral industry

A mining establishment is one predominantly engaged in an activity specified in Division B of the Australian and New Zealand Standard Industrial Classification (ANZIC).

The scope of the Mining division includes all units mainly engaged in 'mining', in exploration for minerals, and in the provision of a wide variety of services to mining and mineral exploration, as well as mining units under development.

The term 'mining' is used in the broad sense to include the extraction of minerals occurring naturally as solids such as coal and ores, liquids such as crude petroleum, or gases such as natural gas. Extraction of minerals is undertaken by such processes as underground or open cut mining, dredging, quarrying, the operation of wells or evaporation pans, or by recovery from ore dumps or tailings, and all supplementary activities aimed at preparing the crude materials for marketing.

Activities include milling, dressing and beneficiation of ores, screening, washing and flotation. These activities are generally carried out at or near mine sites as an integral part of mining operations. Natural gas absorption, purifying and similar treatment plants are also included in this division.

From 1988–89 the annual Mining Census has been restricted to metallic minerals, coal, oil and gas. However, on a triennial basis, including 1989–90, data will be collected for construction materials and other non–metallic minerals. As a consequence it is not possible to relate overall Census totals between years.

In addition, changes to the business units definitions have caused some discontinuities, particularly in relation to the count of establishments. The new treatment of Unincorporated Joint Ventures has led to an increase in the number of establishments in certain industries, *e.g.* gold and oil and gas, and this masks normal fluctuations in these industries. It is not possible to reconcile the count of establishments with the number of mine sites.

Mining Establishments : Summary of Operations by Industry Subdivision, 1990–91

Industry Subdivision	*Number of establishments operating at 30 June 1991*	*Persons employed (a)*	*Wages and salaries*	*Turnover*	*Purchases, transfers in and selected expenses*	*Value added*
			$ million	*$ million*	*$ million*	*$ million*
Metal ore mining	9	2,040	99.9	1,179.0	235.3	926.9
Coal mining	1					
Oil and gas extraction	7					

(a) At 30 June 1991 and includes working proprietors.

Mineral commodities

Mineral commodity statistics published in the *South Australian Year Book* are those recorded by the Director–General of Mines and Energy.

Mining and Quarrying Production[(a)]

Mineral	*Unit of quantity*	*Quantity*		*Value (b)*	
		1990–91	*1991–92*	*1990–91*	*1991–92*
				$'000	*$'000*
Metallic:					
Copper	'000 tonnes	51	67	153,909	186,295
Gold	kg	1,057	785	16,330	11,433
Iron ore	'000 tonnes	2,313	2,264	20,815	20,373
Uranium oxide	tonnes	2,300	1,484	84,103	62,886
Lead	tonnes	25	14	21	9
Zinc ore	'000 tonnes	11	7	1,234	1,708
Silver	tonnes	10	18	1,721	3,004

Mining and Quarrying Production[a] *(continued)*

Mineral	Unit of quantity	Quantity 1990–91	Quantity 1991–92	Value (b) 1990–91	Value (b) 1991–92
				$'000	*$'000*
Non–metallic:					
Barite	'000 tonnes	7	6	596	412
Coal	'000 tonnes	2,469	2,820	69,970	62,291
Dolomite	'000 tonnes	979	757	6,017	4,607
Gypsum	'000 tonnes	1,223	1,179	3,604	2,740
Kaolin	'000 tonnes	4	4	352	309
Limestone	'000 tonnes	1,871	1,989	11,733	11,293
Opal *(c)*	..	..	..	42,446	38,841
Salt	'000 tonnes	886	822	4,737	4,359
Silica	'000 tonnes	104	120	1,707	2,439
Talc	'000 tonnes	12	11	1,061	873
Other	..	..	..	549	516
Construction material, quarrying	'000 tonnes	10,534	9,676	73,826	66,987
Natural sand products	'000 tonnes	2,694	2,718	19,526	19,564
Natural clay products	'000 tonnes	708	1,033	1,962	3,008
Natural gas *(d)*	Millions of m^3	4,364	4,339	343,489	375,372
Condensates	Kilolitres	613,521	826,346	127,515	155,392
Crude oil	Kilolitres	1,325,654	1,298,472	276,956	225,922
Liquefied petroleum gas	'000 tonnes	486	510	107.406	110,532
Total		..	..	*1,383,065*	*1,371,165*

(a) Quantities disposed of as recorded by the Department of Mines and Energy. *(b)* Ex–mine site. *(c)* Estimated. *(d)* Value of gas ex–Moomba plant includes value of CO_2 from Caroline No. 1 well and also value of ethane.

Copper

Copper mining was very important in the early days of the settlement of South Australia. The rich discoveries at Kapunda in 1842, Burra in 1845, and Wallaroo–Moonta in 1859–60 came at a time when the colony's development was stagnating and severe financial difficulties were being encountered.

Copper production fluctuated over the years but renewed interest in copper during the 1960s led to the discovery of new, but lower grade, ore bodies at the old copper fields of Kanmantoo and Mount Gunson, and to the working of remnant low–grade ore at Burra. The Wheal Hughes underground mine near Moonta produced 9,206 tonnes of concentrate, containing 2,887 tonnes of copper and 37.6 kg of gold to the end of June 1993. Cupric oxide is produced at Burra for the manufacture of timber preservatives, catalysts, friction materials for brakes and clutches, copper chemicals and as a trace element in agriculture.

The Olympic Dam deposit at Roxby Downs, which has an area of twenty square kilometres, has indicated ore reserves of at least 2,000 million tonnes averaging 1.6 per cent copper, 0.6 kg/tonne uranium oxide, 0.6 gm/tonne gold and 4gm/tonne silver. Detailed infill drilling has indicated a higher grade zone of ore reserves. The joint venture partners (Western Mining Corporation Ltd and the BP Group) commenced production of this $850 million project in mid–1988. During 1992, 71,213 tonnes of copper, 1,006 tonnes of uranium oxide, 981.5 kg of gold and 14,939 kg of silver were produced.

A further expansion program (Optimisation No. 2) commenced during 1993. This will increase the rated production capacity from 2.4 to 2.9 million tonnes per annum of ore and enable the production of 84,000 tonnes of refined copper per year by 1996.

Western Mining Corporation took full control of the Olympic Dam mine during March 1993 by purchasing BP's 49 per cent interest.

Iron ore

Iron ore is mined in the Middleback Ranges on upper Eyre Peninsula. These ranges lie to the west of Whyalla and extend discontinuously from Iron Knob in the north to Iron Duke nearly 65 kilometres to the south. In excess of 190 million tonnes of ore have been mined since 1900. Production for 1992 was 2.3 million tonnes.

Uranium

Uranium was first discovered at Radium Hill in 1906 and at Mount Painter in 1910. These areas were mined intermittently for radium until 1944 and 1934 respectively.

The demand for uranium at the end of World War II led to detailed investigations by the Mines Department and the reopening of the Radium Hill Mine in 1954; it was worked until 1962 when the contracts for sale of ore were completed and known reserves were almost depleted.

In late 1988, mining of the vast Olympic Dam ore–body at Roxby Downs commenced which included the recovery of uranium together with copper, gold and silver.

The uranium ore is processed and refined on site to the uranium oxide (U_3O_8) or 'yellow–cake' stage for export to overseas power generating facilities. Olympic Dam is currently producing up to 1,400 tonnes of uranium oxide per annum.

Gypsum

The largest Australian reserves of gypsum are located in South Australia. The deposits have in general formed in coastal basins, the largest of these occurring at Lake MacDonnell. Other deposits are found at Streaky Bay, Lake Fowler, Cooke Plains and the Morgan–Blanchetown area.

These deposits have been worked extensively over the past fifty years to provide the bulk of Australasian requirements for the plaster industry and for Portland cement manufacture. In 1992, 1.3 million tonnes were produced.

Salt

Conditions in South Australia are ideal for the production of salt from sea water by solar evaporation. Large solar salt works are located at Dry Creek (near Adelaide), Port Price (Gulf St Vincent), and Whyalla. Salt is also harvested from several saline lakes, in particular Lake Bumbunga and Lake MacDonnell. Production for 1992 was 821,000 tonnes.

Opal

The opal fields at Coober Pedy, Mintabie and Andamooka supply most of the world's precious opal. The estimated value of raw opal production in South Australia was $38.8 million in 1992. Most of this is exported to Hong Kong, Japan, USA and Germany.

Coal

Several large coalfields have been discovered in South Australia but only the Leigh Creek coalfield operated by the Electricity Trust of South Australia is being mined. To date more than 50 million tonnes of coal has been delivered to the power stations at Port Augusta. Production was 2.8 million tonnes during 1992.

Oil and natural gas

The Cooper Basin Liquids Project, completed in September 1984, is the largest onshore petroleum development in Australia.

Production during 1992 amounted to 993,000 kilolitres of crude oil, 733,000 kilolitres of condensate, 457,000 tonnes of liquefied petroleum gas and 4,300 million cubic metres of natural gas. Thus, the South Australian portion of the Cooper Basin contributed a significant proportion of the nation's crude oil and condensate production, LPG output and natural gas requirements.

Limestone and dolomite

Principal deposits include dolomite at Ardrossan for the steel industry; limestone at Penrice, near Angaston, for the chemical and cement industries; and limestone at Klein Point and Rapid Bay for the cement industry. During 1992 production of limestone was 2.2 million tonnes and of dolomite 0.9 million tonnes.

Mineral developments

In the South Australian portion of the Cooper/Eromanga basins petroleum province, located in the far north–east of the State, numerous oil and gas fields were on production at the beginning of 1992, in the area where petroleum was first found at Gidgealpa Field in 1962. Most fields now onstream have preliminary fluid treatment facilities plus a network of separate gas and oil flowlines and trunklines laid to bring all production in to the central Moomba treatment plant for final processing.

At Moomba, the incoming raw gas stream initially has water and carbon dioxide removed. Next, the liquids recovery plant extracts the valuable condensate and LPG from the gas stream. The resultant sales gas is then pipelined to Sydney and Adelaide markets. The separated gas liquids plus the stabilised crude oil from oil fields are finally put into the liquids pipeline leading to the fractionation plant at Port Bonython on Spencer Gulf.

SANTOS Ltd is the operator and principal partner in the production of Cooper Basin oil and gas, and acts as marketing agent for all Port Bonython crude oil. The other producers are Delhi Petroleum Pty Ltd, Bridge Oil Ltd, SAGASCO Resources Ltd, Crusader Ltd, Basin Oil NL, Comada Energy Ltd, Hartogen Energy Ltd and Vamgas Ltd.

Natural gas was discovered at Katnook in late 1987, approximately 10 kilometres south of Penola in the Otway Basin. A gas contract between the Pipelines Authority of South Australia (PASA) and the Petroleum Production Licence No. 62 licensees was signed in August 1990 to supply 1.5 petajoules of gas per year for 15 years. Gas production commenced on 15 February 1991.

Developments continued at the Olympic Dam mine and the mining project has recently been expanded a second time at a cost of $75 million. This expansion will enable production to be maximised, based on the treatment of 2.9 million tonnes of ore annually.

As future power generation in South Australia may require an increase in the use of coal, deposits at Lochiel, Sedan, Bowmans, Kingston and Wintinna continue to be evaluated.

Private Mineral Exploration (Other than Petroleum)
Expenditure by Type of Mineral Sought *(a)*
($ million)

Type of mineral	*1989–90*	*1990–91*	*1991–92*
Copper, lead, zinc, silver, nickel, cobalt	5.9	7.9	11.2
Gold	1.2	1.3	1.5
Iron ore	0.2	–	–
Mineral sands	1.3	2.3	0.9
Tin, tungsten, scheelite, wolfram	n.p.	n.p.	–
Uranium	n.p.	1.0	3.3
Coal	0.1	n.p.	–
Construction materials *(b)*	–	n.p.	–
Diamonds	2.4	2.9	2.6
Other *(c)*	0.9	0.1	0.1
Total	*13.0*	*15.5*	*19.7*

(a) Excludes details of mineral explorers reporting less than $5,000 per quarter.
(b) Comprises aggregate, sand, gravel and all stone used for construction purposes.
(c) Includes precious metals other than gold and silver, and gemstones other than diamonds.

Details of private petroleum exploration and development for South Australia are shown in the following table for the years 1990 to 1992.

Private Petroleum Exploration and Development

Particulars	*Unit*	*1990*	*1991*	*1992*
Wells drilled *(a)*:				
Exploration	No.	42	40	22
Development	No.	24	31	18
Depth drilled:				
Exploration	'000m	101.0	100.3	56.3
Development	'000m	47.5	63.9	39.2
Expenditure:				
Private sources;				
Exploration	$'000	58,000	53,700	60,400
Development	$'000	212,800	273,600	239,000

(a) Number of wells reaching total depth during year.
Source: South Australian Department of Mines and Energy.

12.2 ENERGY

Energy resources

Although South Australia has a reasonably varied energy resource base, the State depends almost entirely on non–renewable fossil fuels for its energy needs. Details of these resources are given below.

Coal

South Australia has one open cut coal mine, located 550 kilometres north of Adelaide at Leigh Creek. It is expected that coal mining will continue at Leigh Creek until the year 2025, supplying coal to both the present 240 megawatts (MW) Thomas Playford B Power Station and the adjoining new 2 x 250 MW Northern Power Station, as well as a possible third 250 MW unit.

During 1992–93 the Electricity Trust of South Australia used 2.8 million tonnes of Leigh Creek coal to meet 44.8 per cent of its total generation commitments, excluding interconnection. The bulk of the remaining requirements were met by natural gas with a small quantity of oil also used.

A significant quantity of high rank bituminous coal is imported into South Australia from the eastern States for the production of coke in the iron and steel industry at Whyalla, and also for use in the lead–zinc smelters at Port Pirie.

A number of longer term energy scenarios for the State have indicated that the proportion of electricity generated from coal may increase during the next century. Consequently the State has been examining the feasibility of using local low grade coals which are in abundant supply.

Natural gas

Over the last twenty years natural gas (largely methane) has become a vital part of South Australia's energy consumption pattern. In January 1993 remaining gas reserves in South Australia were estimated to be 2,880 petajoules.

The State was one of the earliest users of natural gas in Australia with first supplies arriving in Adelaide from the Cooper Basin in November 1969. More than half this gas is presently consumed in electric power generation at the Electricity Trust of South Australia power stations at Torrens Island, Dry Creek and Mintaro. The Trust's use of natural gas provided the economic justification for the construction of the 790 kilometre pipeline needed to deliver the gas to Adelaide, Peterborough, Port Pirie, Mintaro and Angaston. The remainder is reticulated to homes, industry and commercial premises for use directly in heating and drying applications. In 1976 gas production commenced from the South Australian area of the Cooper Basin to the Australian Gas Light Company for the New South Wales market. The gas is transported through a 1,299 kilometre pipeline. The contract ends in September 2006. In early 1989 the existing gas pipeline spur to Port Pirie township and smelters was extended across Spencer Gulf to supply Whyalla's blast furnace and the Port Bonython plant, plus local domestic users. The present gas contract with the Pipelines Authority of SA ends in 2002.

At the end of 1987, natural gas was discovered at Katnook No. 1, approximately 10 kilometres south–west of Penola in the Otway Basin. Although the initial proven gas discovery was small, further exploration and appraisal drilling carried out nearby at Ladbroke Grove No. 1 and Katnook No. 2 and No. 3 during 1989 and 1990, has indicated a gas reserve of sufficient size to supply the State's South East commercial and domestic users presently relying on electricity or fuel oil for their primary heating requirements. In early 1991 a 67 kilometre pipeline to the Apcel paper mill at Snuggery, with a spur line to Mount Gambier, was completed and in February 1991 gas production commenced.

In July 1991 a contract was signed to supply gas from South West Queensland to South Australia via Moomba. The 200 kilometre pipeline was completed in 1993. The gas is transported through the pipeline with 300 petajoules to be purchased by South Australia over a ten year period commencing 1 January 1994.

Liquid petroleum gas (LPG)

Recoverable LPG reserves in the Cooper Basin in January 1993 were about 6.5 million tonnes. LPG (propane and butane) is recognised as an important substitute for petrol in South Australia. LPG is used in the production of synthetic natural gas, which is reticulated as town gas in Renmark and Roxby Downs.

The Cooper Basin producers have constructed an LPG storage and loading terminal at Port Bonython, near Whyalla, which is connected to the Moomba processing facilities by a liquids pipeline. The bulk of South Australia's LPG requirements are now supplied from this facility, although the Port Stanvac refinery will continue to supply small amounts to the local market. Sales of commercial LPG commenced in June 1984 with the first overseas exports taking place in August 1984.

Crude oil and condensate

Crude oil and condensate in this State currently satisfies about 43 per cent of energy demand. While Australia is better situated than many other countries in terms of having a local source of oil, in 1988–89 this State imported 68.0 per cent of its feedstock requirements from overseas.

Information provided by the South Australian Department of Mines and Energy indicates that discovered fields in the South Australian segment of the Cooper and Eromanga Basins contain 7.6 million kilolitres of recoverable crude oil and 7.9 million kilolitres of condensate (liquids recoverable from gas wells) at January 1993.

Wood

Approximately 2 per cent of this State's annual energy demand is met by wood. Its main use is in the domestic sector as a heating fuel, although some (largely wood waste) is used in industry, particularly in the forestry industry and for generating some electricity in the south–east of the State. Currently, most wood supplies come from the State's forestry areas in the South East and from the Riverland mallee scrub.

Electricity

The Electricity Trust of South Australia (ETSA), a public corporation, is responsible for electricity generation and distribution throughout most of the State. The Trust is an autonomous body, which reports to Parliament through the Minister of Infrastructure. It is responsible for its own finances (including loan raising) and pays all normal State taxes such as payroll tax, land tax and local government rates.

There are seven power stations in South Australia controlled by ETSA. Torrens Island Power Station, with a generating capacity of 1,280 MW, is the largest, while the Northern Power Station, commissioned in 1985, has a generating capacity of 500 MW. The Electricity Trust's total capacity at 30 June 1993 was 2,230 MW.

To meet future demands, a third 250 MW unit at the Northern Power Station or its base load plant equivalent will be required some time after 1998.

The three–State interconnection linking South Australia to the Victoria/New South Wales power grid was first connected on 30 November 1989 and commenced commercial operation on 1 March 1990. The interconnection project provided the equivalent of 250 MW of peaking capacity through the sharing of reserves with Victoria and New South Wales. This allowed the retirement in March 1990 of the remaining plant at Osborne Power Station and will defer the need for extra capacity.

The Trust relies on natural gas as its main fuel with near 47 per cent of its total generation in 1992–93 coming from this source. Gas has been used at the Torrens Island Power Station since 1969, at the Dry Creek Power Station since 1973, and at Mintaro since 1984.

Leigh Creek coal is used exclusively in the Thomas Playford Power Station and the Northern Power Station at Port Augusta and provided approximately 39% of total generation.

The majority of the balance of the State's electrical energy came from interconnection with the Eastern States. New trading arrangements are being developed to move to a National Grid concept. The development of any future capacity will come under protocols being developed.

About 90 per cent of new housing subdivisions are underground mains areas. In these subdivisions 11 KV and low voltage lines are installed underground and developers pay a contribution towards ETSA's costs. The Electricity Trust and local government authorities share the costs of conversion schemes from overhead to underground reticulation in areas where aesthetic benefits to the general public are possible.

Electricity Trust of South Australia, Sales of Electricity (GWh)

Particulars	*1991*	*1992*	*1993*
Residential	3,131.1	3,072.7	3,255.2
Industrial	2,593.1	*(a)*2,786.9	*(a)*2,939.4
General purpose	1,937.6	1,940.9	2,014.2
Bulk supply	246.3	22.1	20.9
Public lighting	63.1	64.4	66.1
Pumping for major water pipelines	214.4	187.1	91.8
Total	*8,185.6*	*8,074.0*	*8,387.4*

(a) Includes sales to farms, previously included in bulk supply.

At 30 June 1992 the Trust supplied 680,644 customers accounting for almost 99 per cent of all electricity customers in the State. The South Australian Government pays subsidies to reduce the price of electricity by independently owned and operated electricity undertakings in remote areas of the State. These include 1,500 customers supplied by diesel plant operated by the District Council of Coober Pedy. There are a further 17 small towns and isolated outback communities equipped with diesel generating plant and supplying 1,000 customers. On 1 July 1992 ETSA took responsibility for customers previously supplied by diesel and gas plant operated by the District Council of Peterborough.

Gas

The South Australian Gas Company, was a privately owned company incorporated and regulated by an 1861 Act of Parliament to supply gas to Adelaide and surrounding villages. The first gas was produced at Brompton in 1863 and subsequent plants were opened at Port Adelaide in 1866 and Glenelg in 1875. Gas was first produced at Port Pirie in 1892.

In June 1988 the Gas Company merged with the Government owned South Australian Oil and Gas Corporation (SAOG) to form a new company, SAGASCO Holdings Ltd. The utility is now known as South Australian Gas Company Limited and SAOG has been renamed SAGASCO Resources Ltd. A new company, SAGASCO LPG Pty Ltd was formed to control the LPG portion of the business.

Since the 1950s a considerable expansion of the distribution system has taken place. This is evident from the following table which gives details of the number of consumers and length of mains at 30 June in selected years.

South Australian Gas Company Limited, Consumers and Mains

	At 30 June				31 Dec.
Particulars	*1970*	*1980*	*1990*	*1991*	*1992*
Number of consumers.....	186,670	250,545	317,123	*(a)*287,240	295,407
Length of mains (km).....	3,603	4,967	5,890	6,083	6,181

(a) SAGASCO LPG customers have been excluded from 1991. In 1990 they totalled 38,000.

Natural gas from the Cooper Basin became available in 1969. By 1971, all appliances in the Adelaide metropolitan area had been converted to natural gas, and all coal carbonising and carburetted water gas making plants were shut down.

Natural gas is reticulated through most of the Adelaide metropolitan area, as well as Port Pirie (since 1976), Angaston (1983), Peterborough (1987), Whyalla (1988) and Mount Gambier (1991). Liquefied petroleum gas is reticulated to consumers in Roxby Downs.

Chapter 13

COMMERCE

13.1 INTERNAL TRADE

Retail trade

Estimates of the value of turnover of retail establishments are calculated from monthly returns received from a sample of retail and selected service establishments. This survey uses as its sampling frame the ABS register of businesses which is regularly updated to take account of new businesses and those ceasing operation.

Turnover of Retail Establishments at Current Prices by Industry
($ million)

Industry	*1990–91*	*1991–92*	*1992–93*
Grocers, confectioners, tobacconists	2,191.2	2,300.8	2,330.1
Butchers	182.0	135.9	117.9
Other food stores	539.9	603.1	476.3
Hotels, liquor stores, licensed clubs	768.4	778.5	738.8
Cafes and restaurants	313.4	326.4	318.9
Clothing and fabric stores	461.2	384.6	355.2
Department and general stores	1,060.0	1,078.2	1,092.1
Footwear stores	101.8	101.0	101.7
Domestic hardware stores, jewellers	173.2	207.1	259.3
Electrical goods stores	432.6	419.9	372.9
Furniture stores	173.2	174.3	199.3
Floor coverings stores	63.4	49.8	46.1
Pharmacies	305.3	298.6	366.7
Newsagents	166.8	126.2	148.7
Other retail industries	344.4	357.4	357.6
Total	*7,276.3*	*7,341.2*	*7,281.1*

Retail Census

Another source of statistics on the retail industry is the Retail Census. The last Retail Census was conducted for the year ended 30 June 1992. The results from the Census showed that in South Australia there were 14,317 Shopfront Retailing establishments employing 83,306 people. The total turnover was $7,442 million and wages and salaries paid totalled $851 million.

Service industries

The 1986–87 Service Industries Survey covered ten personal and travel related industries. Seven of these were also part of the 1979–80 Census of Retail and Selected Services Industries, therefore allowing some comparisons between the two periods. (These industries are motion picture theatres, cafes and restaurants, hotels (mainly drinking places), accommodation, licensed clubs, laundries and dry cleaners, and hairdressers and beauty salons.) Data for motor vehicle hire, travel agency services and photography services were collected for the first time.

The 1987–88 Service Industries Survey covered twelve professional and business related industries. The industries included previously had not been surveyed in this detail by ABS so there are no earlier statistics available to which they can be compared. A similar Service Industries Survey was conducted in 1991–92 and will be conducted for 1992–93.

A brief summary of details of the 1986–87 and 1987–88 Surveys was included on pages 225–6 of the *South Australian Year Book 1991*.

Tourism

Tourist accommodation surveys commenced in September quarter 1975 to provide an indication of the utilisation of accommodation available by measuring occupancy rates. The surveys calculate occupancy rates as the proportion of guest rooms, sites or units occupied to the number of rooms, sites or units available for accommodating paying guests.

Tourist Accommodation Survey

Particulars	*Unit*	*Quarter*			
		June 1992	*Sept. 1992*	*Dec. 1992*	*Mar. 1993*
LICENSED HOTELS WITH FACILITIES					
Establishments at end of quarter	Number	126	125	125	121
Guest rooms	Number	4,490	4,544	4,573	4,538
Room occupancy rate	Per cent	45.0	44.9	48.1	45.1
Takings	$'000	14,579	14,500	18,277	15,237
MOTELS ETC. WITH FACILITIES					
Establishments at end of quarter	Number	245	241	242	242
Guest rooms	Number	6,255	6,199	6,190	6,201
Room occupancy rate	Per cent	46.6	45.3	47.5	48.3
Takings	$'000	16,424	15,934	17,785	16,973
SHORT–TERM CARAVAN PARKS					
Establishments at end of quarter	Number	176	174	173	171
Sites *(a)*	Number	20,601	20,661	20,462	20,159
Site occupancy rate	Per cent	16.1	*(b)*17.8	22.1	26.6
Takings	$'000	4,405	3,901	5,167	6,084
LONG–TERM CARAVAN PARKS					
Establishments at end of quarter	Number	34	37	38	40
Sites *(a)*	Number	3,951	3,860	3,845	4,307
Site occupancy rate	Per cent	40.2	*(b)*38.7	42.7	39.5
Takings	$'000	1,327	1,228	1,348	1,430
HOLIDAY FLATS, UNITS AND HOUSES					
Letting entities	Number	85	84	84	83
Flats, units etc.	Number	1,302	1,279	1,323	1,313
Unit occupancy rate	Per cent	37.0	34.0	40.0	49.9
Takings	$'000	2,280	2,213	2,905	3,263
VISITOR HOSTELS					
Establishments at end of quarter	Number	34	35	40	41
Bed spaces	Number	1,571	1,635	1,992	1,970
Bed occupancy rates	Per cent	36.2	30.5	30.0	33.6
Takings	$'000	456	370	558	598

(a) Includes on–site vans, other powered sites, unpowered sites and cabins, flats etc. *(b)* From September quarter 1992, includes permanently reserved sites irrespective of whether the tenants were in residence.

Establishments in the surveys are grouped into five categories – licensed hotels with facilities, *i.e.* bath or shower and toilet in most guest rooms; licensed or unlicensed motels, private hotels or guesthouses with facilities; caravan parks with powered sites for caravans, and toilet, shower and laundry facilities available for guests; and self–contained holiday flats, units and houses; and visitor hostels.

Caravan parks were included in the surveys from the September quarter 1977. Excluded from that time were licensed hotels, private hotels and guesthouses without facilities. Up to the June quarter 1986 the surveys included

establishments providing accommodation predominantly to short–term guests (*i.e.* guests staying for periods of less than 2 months).

Commencing with the September quarter 1986 caravan parks which are predominantly occupied by long–term guests were included. Holiday flats and serviced apartments providing self–catering facilities were included from the September quarter 1987. Establishments comprising at least 5 units providing short–term accommodation are included in the survey.

Visitor hostels which provide accommodation to visitors on a bed basis (rather than by the room) have been included in the surveys from September quarter 1991.

The number of establishments identified in the survey is determined by the nature of the services and facilities provided, and 121 licensed hotels with facilities, 242 motels, 171 short–term caravan parks, 40 long–term caravan parks and 83 letting entities (with letting rights to at least 5 flats, units or houses) and 41 visitor hostels were included in the March quarter 1993.

Tourist Accommodation by Statistical Division and Subdivision, 1991–92

	Licensed hotels, motels etc. with facilities			*Short–term caravan parks*		
Statistical Division and Subdivision	*Establishments at 30 June 1992*	*Guest rooms at 30 June 1992*	*Average room occupancy rate 1991–92*	*Establishments at 30 June 1992*	*Sites at 30 June 1992*	*Average site occupancy rate for 1991–92*
	number	*number*	*per cent*	*number*	*number*	*per cent*
Northern	23	428	35.8)			
Western	16	312	45.6)	5	1,038	43.4
Eastern	58	3,765	55.1)			
Southern	29	872	51.8	8	956	30.7
Adelaide	*126*	*5,377*	*52.4*	*13*	*1,994*	*37.5*
Barossa	19	272	42.7	4	506)	
Kangaroo Island	11	236	34.6)	4	194)	14.9
Onkaparinga	4	112	42.7)		)	
Fleurieu	19	413	40.7	15	2,520	13.8
Outer Adelaide	*53*	*1,033*	*40.1*	*23*	*3,220*	*13.8*
Yorke	17	238	34.2	25	2,580	20.9
Lower North	10	145	46.0	7	521	15.2
Yorke and Lower North	*27*	*383*	*38.4*	*32*	*3,101*	*20.0*
Riverland	19	625	37.8	13	1,946	20.1
Murray Mallee	15	224	33.1	17	1,407	8.5
Murray Lands	*34*	*849*	*36.5*	*30*	*3,353*	*15.1*
Upper South East	21	391	38.9	9	1,003	12.2
Lower South East	33	772	45.5	11	1,557	10.9
South East	*54*	*1,163*	*43.2*	*20*	*2,560*	*11.5*
Lincoln	22	352	34.3	13	1,559	14.0
West Coast	9	281	29.8	9	1,107	12.5
Eyre	*31*	*633*	*32.3*	*22*	*2,666*	*13.4*
Whyalla	12	293	65.0)			
Far North	10	363	36.5)	11	1,483	15.6
Pirie	8	179	44.7	10	668	11.0
Flinders Ranges	16	472	42.8	15	1,556	16.4
Northern	*46*	*1,307*	*46.2*	*36*	*3,707*	*15.1*
South Australia	**371**	**10,745**	**46.6**	**176**	**20,601**	**17.1**

Tourist Accommodation: Details by Size of Establishment March Quarter 1993

Particulars	Unit	Size of establishment (number of rooms) 1–9	10–15	16–25	26–50	51 and over	Total
LICENSED HOTELS WITH FACILITIES							
Establishments	Number	28	31	20	23	19	121
Guest rooms	Number	195	360	398	752	2,833	4,538
Room occupancy rate	Per cent	25.4	35.3	32.9	44.1	49.7	45.1
Takings	$'000	191	407	370	1,740	12,529	15,237
MOTELS ETC. WITH FACILITIES							
Establishments	Number	41	54	55	73	19	242
Guest rooms	Number	242	683	1,147	2,704	1,425	6,201
Room occupancy rate	Per cent	34.6	46.0	44.4	48.2	55.0	48.3
Takings	$'000	453	1,469	2,545	7,612	4,895	16,973

Particulars	Unit	Size of establishment (number of sites) 1–50	51–100	101–200	201 and over	Total
SHORT-TERM CARAVAN PARKS						
Establishments	Number	38	53	59	21	171
Sites	Number	1,370	3,873	8,097	6,819	20,159
Site occupancy rate	Per cent	16.2	28.3	29.1	24.8	26.6
Takings	$'000	239	1,085	2,706	2,054	6,084
LONG-TERM CARAVAN PARKS						
Establishments	Number	9	13	14	4	40
Sites	Number	287	1,082	1,957	981	4,307
Site occupancy rate	Per cent	41.1	34.9	36.1	51.0	39.5
Takings	$'000	129	299	598	405	1,430

Further references

Additional information may be found in the following ABS publications:

8501.0 *Retail Trade, Australia* (Monthly)
8622.4 *Retail Industry, Details of Operations, South Australia*
8623.4 *Retail Industry, Small Area Statistics, South Australia*
8635.0 *Tourist Accommodation, Australia* (Quarterly)
8635.4 *Tourist Accommodation, South Australia* (Quarterly)
3401.0 *Overseas Arrivals and Departures, Australia* (Monthly)
3402.0 *Overseas Arrivals and Departures, Australia* (Quarterly)
1130.0 *Directory of Tourism Statistics, 1991*

13.2 FOREIGN TRADE

Administration

Under the Constitution of Australia, the Commonwealth Parliament is responsible for legislation relating to trade and commerce with other countries. Matters relating to trade and commerce are dealt with by these Commonwealth Government Departments.

The Department of Foreign Affairs and Trade is responsible for developing and maintaining Australia's position as a world trading nation through international trade and commodity commitments and agreements, developing export markets, and formulating proposals for the Government on Australia's international trade policy and trading objectives. It is also responsible for matters related to

the commercial development, marketing, and export of minerals and fuels. It has Trade Commissioners at various overseas centres.

The Department of Industry, Technology and Regional Development, through the encouragement of world–class enterprises and the pursuit of regional development, promotes the integration of Australian industry with global markets through investment, trade finance and industrial, scientific and technological collaboration. It cooperates with the Department of Foreign Affairs and Trade in international market access negotiations. The Australian Customs Service is responsible for the collection of customs and excise duties and for the detailed administration of various controls over the import and export of goods.

The Department of Primary Industries and Energy administers Commonwealth policy relating to production and marketing arrangements for primary products. It cooperates with the Department of Foreign Affairs and Trade in the negotiation of international trade and commodity agreements, in participation in international conferences, and in the administration of provisions relating to primary products in existing international agreements. The Australian Quarantine and Inspection Service is responsible for the inspection, grading, and labelling of primary produce submitted for export.

The State Government is represented overseas by South Australia's Agent–General in London whose functions are to foster Australian trade, investment and tourism from the United Kingdom and Western Europe. Other agencies with similar responsibilities are in Hong Kong, Singapore and Tokyo.

Recording method

Foreign trade statistics are compiled by the Australian Bureau of Statistics from documentation submitted by exporters and importers, or their agents, to the Australian Customs Service as required by the Customs Act.

Exports

The basis of recording State details in Australian export statistics is 'State of Origin' (of exported goods). State of origin is defined as the State in which the final stage of production or manufacture occurs.

Imports

Imports are collected and published on a 'State of Lodgment of Import Documents' basis. Imports do not provide a record of the overseas goods used or consumed in South Australia as some of the goods pass subsequently to other Australian States and, more commonly, some goods imported through other States pass into South Australia.

Valuation

Exports

Goods actually sold to overseas buyers before shipment are valued at the free–on–board (f.o.b.) (*i.e.* the charges and expenses involved in delivering the goods are excluded) Australian port of shipment equivalent of the actual price at which the goods were sold.

Goods shipped on consignment are valued at the f.o.b. Australian port of shipment equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods are dispatched for sale. The recorded value of exports includes the value of the outside package, other than international containers used for containerised cargo. Exporters who

do not know the value of the goods at shipment and enter an appropriate value must subsequently submit an entry either confirming or revising the estimated return.

Imports

The recorded value of imports is the Customs value (formerly referred to as the value for duty). On 30 November 1981, Australia changed its system of valuation from the Brussels Definition of Value (BDV) to the GATT Agreement on Customs Valuation. The Agreement reflects one of a number of trade related codes of conduct established during the round of Multilateral Trade Negotiations (MTN) concluded in 1979. Under the Agreement the primary basis for establishing the Customs value is the price actually paid or payable, provided a number of conditions are met. The most important condition is that the buyer and seller must be independent of each other. If the conditions are not met the GATT Agreement offers a set of practical rules to determine the Customs value.

The recording of the value of imports remains on a free–on–board (f.o.b.) basis. However, from 1 July 1989, the place of exportation for customs valuation purposes has been restricted so that customs value includes at least all charges incurred up to the point of containerisation. The recorded value also continues to include the value of the outside package, other than international containers used for containerised cargo.

Exports

The total value of exports of South Australian origin during 1991–92 was $3,149.9 million. This value is 4.8 per cent higher than 1990–91.

Wheat and wool again remained South Australia's most valuable export commodities during 1991–92. Confidentiality restrictions on country of destination were implemented in December 1991 for wheat exports.

The following table depicts the major export commodities for the three years to 1991–92 which have been compiled using the Standard International Trade Classification, Revision 3 (SITC) and are therefore not comparable with the same table shown in previous editions of this Year Book.

Overseas Exports from South Australia, Principal Commodities

Commodity	*1989–90*	*1990–91*	*1991–92*
	GROSS WEIGHT (tonnes) *(a)*		
Beef fresh, chilled or frozen	52,131	56,953	45,632
Other meat and offal (excl. bovine) fresh, chilled or frozen	46,164	56,749	74,148
Crustaceans, molluscs and aquatic invertebrates	6,324	6,621	7,227
Wheat	1,863,106	2,251,479	1,819,613
Barley	1,449,331	1,483,217	1,165,047
Vegetables fresh, chilled, frozen or preserved	135,880	113,433	156,285
Fruit and nuts (excl. oil nuts) fresh or dried	30,049	36,033	47,452
Alcoholic beverages	42,121	62,023	85,982
Wool and other animal hair (incl. wool tops)	50,486	59,814	86,830
Petroleum oils and oils from bituminous minerals:			
Crude	534,846	436,203	999,700
Not crude	299,343	714,716	579,420
Ingots and other primary forms of iron and steel	307,553	300,125	368,196
Copper	34,998	63,819	47,241
Lead	90,969	116,605	183,557
Road vehicles, parts and accessories	20,494	18,785	19,082

Overseas Exports from South Australia, Principal Commodities *(continued)*

Commodity	*1989–90*	*1990–91*	*1991–92*
	VALUE ($'000)		
Beef fresh, chilled or frozen	151,420	129,934	139,897
Other meat and offal (excl. bovine) fresh, chilled or frozen	92,661	104,265	129,814
Crustaceans, molluscs and aquatic invertebrates	98,328	103,801	123,344
Wheat	414,442	333,799	345,964
Barley	243,151	205,379	168,565
Vegetables fresh, chilled, frozen or preserved	41,989	35,508	44,983
Fruit and nuts (excl. oil nuts) fresh or dried	25,358	32,724	46,114
Alcoholic beverages	74,005	124,351	168,072
Wool and other animal hair (incl. wool tops)	269,184	249,372	342,578
Petroleum oils and oils from bituminous minerals:			
Crude	106,887	104,979	232,535
Not crude	81,217	186,527	108,922
Ingots and other primary forms of iron and steel	97,875	89,708	98,837
Copper	117,507	136,500	137,364
Lead	91,168	110,332	144,378
Road vehicles, parts and accessories	161,704	117,218	137,091

(a) Gross weight is shipping weight (*i.e.* total weight including outside packages but excluding weight of international containers).

Overseas Exports from South Australia, Principal Commodity Groups ($'000)

Commodity group	*1989–90*	*1990–91*	*1991–92*
Food and live animals:			
Live animals other than fish	24,883	6,053	10,803
Meat and meat preparations	241,118	237,443	270,231
Fish and fish preparations	108,053	123,461	147,532
Cereals and cereal preparations	742,999	580,675	565,582
Vegetables and fruit	76,293	79,367	107,997
Other	36,011	33,701	47,928
Beverages and tobacco	72,889	122,264	168,383
Crude materials, inedible (except fuels):			
Textile fibres and their wastes	271,312	236,970	343,097
Metalliferous ores and metal scrap	42,865	54,322	52,787
Other	49,490	42,426	39,184
Mineral fuels, lubricants and related materials	215,688	298,575	347,254
Animal and vegetable oils, fats and waxes	5,504	2,761	3,289
Chemicals and related products n.e.c.:			
Medicinal and pharmaceutical products	12,688	14,723	12,893
Other	19,454	42,922	49,361
Manufactured goods classified chiefly by material:			
Iron and steel	94,026	105,494	108,841
Non–ferrous metals	243,564	278,131	332,813
Other	78,535	123,107	124,817
Machinery and transport equipment:			
Power generating machinery and equipment	28,927	42,161	61,897
Machinery specialised for particular industries	21,958	28,647	26,267
Electrical machinery, appliances and parts	39,126	43,047	56,255
Transport equipment	167,217	129,299	143,457
Other	24,742	32,231	32,115
Miscellaneous manufactured articles:			
Professional and scientific instruments; photographic and optical goods; clocks	31,340	34,580	41,274
Other	28,499	28,872	43,404
Commodities and transactions n.e.c. *(a)*	164,110	284,133	12,425
Total	*2,841,290*	*3,005,365*	*3,149,885*

(a) Includes items deemed confidential.

Liquefied petroleum gas (LPG) is a principal export commodity, but because of confidentiality restrictions, no details are available at the State level.

The bulk of exports of goods is classified as primary products. In 1991–92 the 'Food and live animals' group accounted for $1,150.1 million or 36.5 per cent, and the 'Crude materials, inedible' group accounted for $435.1 million or 13.8 per cent of exports (including wool $342.6 million, 10.9 per cent).

Overseas Exports : South Australia to Principal Countries
Commodity Groups, 1991–92
($'000)

Commodity group	*Japan*	*New Zealand*	*USA*	*United Kingdom*	*Total (a)*
Food and live animals:					
Live animals other than fish	7	114	6	–	10,803
Meat and meat preparations	43,688	1,139	83,813	19,787	270,231
Fish and fish preparations	60,797	125	34,301	7	147,532
Cereals and cereal preparations	60,213	12,560	–	83	565,582
Vegetables and fruit	9,952	7,306	491	3,451	107,997
Other	19,362	1,589	3,466	265	47,928
Beverages and tobacco	5,962	14,063	19,546	65,708	168,383
Crude materials, inedible (except fuels):					
Textile fibres and their wastes	40,638	–	11,000	12,052	343,097
Metalliferous ores and metal scrap	25,867	145	–	61	52,787
Other	5,332	1,633	2,128	339	39,184
Mineral fuels, lubricants and related materials	147,932	9,712	16,784	–	347,254
Animal and vegetable oils, fats and waxes	507	–	185	559	3,289
Chemicals and related products n.e.c.:					
Medicinal and pharmaceutical products	23	104	1,520	1,656	12,893
Other	1,097	5,485	12,332	6,810	49,361
Manufactured goods classified by material:					
Iron and steel	2,851	1,097	1,297	2	108,841
Non–ferrous metals	30,372	15,110	6,795	61,144	332,813
Other	15,508	12,779	21,232	1,406	124,817
Machinery and transport equipment:					
Power generating machinery and equipment	35,669	1,701	1,098	517	61,897
Machinery specialised for particular industries	562	2,329	2,815	1,392	26,267
Electrical machinery, apparatus, appliances and parts	333	15,931	12,747	4,318	56,255
Transport equipment	22,171	75,659	18,454	1,866	143,457
Other	3,244	3,859	3,627	966	32,115
Miscellaneous manufactured articles:					
Professional and scientific instruments; photographic and optical goods; clocks	1,510	1,965	10,838	5,076	41,274
Other	865	16,154	10,606	3,989	43,404
Commodities and transactions n.e.c. *(b)*	189	462	377	143	12,425
Total	*534,651*	*201,021*	*275,458*	*191,597*	*3,149,885*

(a) To all countries. *(b)* Includes items deemed confidential.

Japan replaced the United Kingdom as South Australia's principal export market in 1966–67 and retained that position until 1978–79. For the next three years USSR was the principal export market, but from 1982–83 Japan once again became the country of consignment with the highest value of exports. In 1991–92 exports to Japan comprised 17.0 per cent of the total.

Overseas Exports from South Australia, Principal Countries
($'000)

Country of consignment	*1989–90*	*1990–91*	*1991–92*
Canada	34,329	41,415	34,344
China	84,724	143,331	116,785
France	38,342	32,084	39,565
Germany	95,716	84,978	94,179
Hong Kong	52,885	79,904	101,021
India	50,819	65,829	26,419
Indonesia	82,081	49,850	95,002
Iran	197,351	155,845	81,543
Italy	47,014	59,508	37,720
Japan	353,148	443,141	534,651
Korea, Republic of	55,495	115,005	121,125
Malaysia	51,770	73,074	62,591
New Zealand	293,885	191,885	201,021
Saudi Arabia	136,236	32,098	52,854
Singapore	85,634	202,058	135,529
Taiwan	99,353	94,859	136,017
United Arab Emirates	67,785	62,649	41,637
United Kingdom	118,295	180,897	191,597
United States of America	238,843	324,551	275,458
USSR *(a)*	72,361	107,587	29,687
Other	585,224	464,817	741,140
Total	*2,841,290*	*3,005,365*	*3,149,885*

(a) The former USSR has changed and care should be taken when comparing data.

Exports of wheat

In 1991–92, 1.8 million tonnes of South Australian wheat with a value of $346.0 million was exported overseas. This was a decrease in quantity of 19.2 per cent. No details are available on country of consignment because of confidentiality restrictions.

Exports of wool

In 1991–92 the major export markets for South Australian wool were China ($78.0 million, 22.8 per cent), Japan ($40.6 million, 11.9 per cent) and Taiwan ($28.2 million, 8.2 per cent) followed closely by France and Korea.

Overseas Exports of Wool[(a)] from South Australia
($'000)

Country of consignment	*1989–90*	*1990–91*	*1991–92*
China	10,523	35,097	78,042
France	18,242	19,531	27,561
Germany	31,969	11,578	19,924
India	6,887	8,588	10,872
Italy	22,923	29,192	18,102
Japan	28,480	28,441	40,638
Korea, Republic of	12,820	21,217	27,316
Taiwan	7,333	8,484	28,193
United Kingdom	6,768	6,869	12,050
USSR *(b)*	58,681	17,049	15,789
Other	64,558	63,326	64,091
Total	*269,184*	*249,372*	*342,578*

(a) SITC 268. Wool and other animal hair (includes wool tops). *(b)* The USSR has changed and care should be taken when comparing data.

Imports

The total value of overseas imports passing through Customs recording points in South Australia during 1991–92 was $2,376.3 million, an increase of 8.3 per cent from 1990–91.

The proportions of imports obtained from the major sources have changed considerably in the years since the 1939–45 War *e.g.* in 1953–54 Japan supplied only 0.5 per cent of the total value of imports into South Australia but in 1991–92 accounted for 23.4 per cent; the United Kingdom which supplied over half the imports in 1953–54 accounted for only 9.0 per cent in 1991–92. Japan was the major source of imports into South Australia in 1991–92 with $555.1 million, followed by the USA ($359.8 million), United Kingdom ($214.9 million), Indonesia ($188.7 million) and Saudi Arabia ($157.7 million).

Overseas Imports to South Australia, Principal Commodity Groups ($'000)

Commodity group	*1989–90*	*1990–91*	*1991–92*
Food and live animals:			
Fish and fish preparations	17,176	17,642	19,283
Other	37,804	38,874	43,591
Beverages and tobacco	16,816	22,411	19,221
Crude materials, inedible (except fuels):			
Cork and wood	37,972	33,788	40,426
Crude fertilisers and crude minerals	21,359	9,175	9,921
Other	30,785	42,084	32,670
Mineral fuels, lubricants and related materials	205,115	425,562	363,059
Animal and vegetable oils, fats and waxes	2,387	2,892	2,997
Chemicals and related products n.e.c.:			
Organic chemicals	23,871	19,973	25,158
Fertilisers (excl. crude)	44,516	40,687	44,268
Plastics in non–primary forms	19,520	14,972	15,361
Other	75,734	63,001	68,787
Manufactured goods classified chiefly by material:			
Rubber manufactures n.e.c.	44,645	36,325	37,694
Cork and wood manufactures (excl. furniture)	30,618	30,195	37,511
Paper, paperboard and manufactures thereof	54,984	45,075	62,039
Textile yarn, fabrics and made–up articles	49,241	49,087	62,884
Non–metallic mineral manufactures n.e.c.	46,084	38,490	43,149
Iron and steel	80,296	66,659	69,109
Manufactures of metal n.e.c.	52,350	54,592	74,404
Other	11,305	12,393	12,092
Machinery and transport equipment:			
Power generating machinery and equipment	45,185	51,620	75,657
Machinery specialised for particular industries	107,906	148,089	63,983
Metalworking machinery	16,511	16,304	65,485
General industrial machinery and equipment, and machine parts n.e.c.	134,356	122,909	136,135
Office machines and ADP machines	28,982	30,036	28,550
Telecommunications and sound recording and reproducing apparatus and equipment	18,099	21,203	21,123
Electrical machinery, apparatus, appliances and parts	103,756	121,086	132,916
Road vehicles	414,780	372,601	435,121
Other transport equipment	27,226	17,181	114,895
Miscellaneous manufactured articles:			
Professional, scientific and controlling instruments; photographic and optical goods; clocks and watches	73,402	73,289	85,985
Other	117,065	121,289	127,299
Commodities and transactions n.e.c. *(a)*	60,106	34,242	5,557
Total	*2,049,952*	*2,193,725*	*2,376,330*

(a) Includes items deemed confidential.

Overseas Imports to South Australia, Principal Countries ($'000)

Country of origin	*1989–90*	*1990–91*	*1991–92*
Austria	22,761	24,090	19,122
Canada	30,471	27,989	25,228
China	23,035	28,518	41,099
France	44,237	44,474	64,786
Germany	114,169	155,364	128,917
Hong Kong	31,314	28,100	23,161
India	10,757	19,800	11,972
Indonesia	22,008	139,414	188,731
Italy	64,122	56,232	57,167
Japan	530,275	498,627	555,105
Korea, Republic of	31,015	35,132	44,537
Malaysia	32,148	27,292	33,406
New Zealand	66,443	73,598	87,316
Saudi Arabia	132,424	243,018	157,699
Singapore	62,567	51,373	47,915
Switzerland	19,088	25,098	6,573
Taiwan	59,573	60,003	67,897
Thailand	23,811	33,784	32,118
United Kingdom	118,028	99,462	214,892
United States of America	432,329	343,317	359,783
Other	179,377	179,040	208,906
Total	*2,049,952*	*2,193,725*	*2,376,330*

The following table shows for 1991–92 the imports from principal countries by commodity group.

Overseas Imports : South Australia from Principal Countries Commodity Groups, 1991–92 ($'000)

Commodity group	*Japan*	*USA*	*UK*	*Indonesia*	*Total (a)*
Food and live animals:					
Fish and fish preparations	118	93	144	293	19,283
Other	240	5,551	2,675	419	43,591
Beverages and tobacco	–	3,254	5,154	–	19,221
Crude materials, inedible (except fuels):					
Cork and wood	–	12,695	2	218	40,426
Crude fertilisers and crude minerals	4,283	2,111	9	–	9,921
Other	310	4,163	159	2,166	32,670
Mineral fuels, lubricants and related materials	146	297	71	176,174	363,059
Animal and vegetable oils, fats and waxes	–	211	–	–	2,997
Chemicals and related products n.e.c.:					
Organic chemicals	4,323	4,338	2,878	203	25,158
Fertilisers (excl. crude)	–	31,336	36	–	44,268
Plastics in non-primary forms	1,379	5,046	1,078	42	15,361
Other	5,914	23,098	6,417	20	68,787
Manufactured goods classified chiefly by material:					
Rubber manufactures n.e.c.	13,689	4,483	1,463	271	37,694
Cork and wood manufactures (excl. furniture)	63	1,539	23	918	37,511
Paper, paperboard and manufactures thereof	8,363	3,500	2,122	1,162	62,039
Textile yarn, fabrics and made-up articles	2,653	5,052	1,772	2,695	62,884
Non-metallic mineral manufactures n.e.c.	7,789	3,634	3,273	143	43,149
Iron and steel	44,205	2,387	1,045	–	69,109
Manufactures of metal n.e.c.	9,975	6,883	3,265	630	74,404
Other	197	750	1,126	20	12,092

Overseas Imports : South Australia from Principal Countries
Commodity Groups, 1991–92 *(continued)*
($'000)

Commodity group	*Japan*	*USA*	*UK*	*Indonesia*	*Total (a)*
Machinery and transport equipment:					
Power generating machinery and equipment	9,669	21,892	17,897	–	75,657
Machinery specialised for particular industries	8,841	15,132	1,668	–	63,983
Metalworking machinery	19,967	1,672	3,954	–	65,485
General industrial machinery and equipment and machine parts n.e.c.	30,188	27,678	9,891	20	136,135
Office machines and ADP machines	881	7,745	581	–	28,550
Telecommunications and sound recording, and reproducing apparatus and equipment	4,506	8,355	2,287	151	21,123
Electrical machinery, apparatus, appliances and parts	19,953	23,435	10,011	1,141	132,916
Road vehicles	340,475	66,519	2,335	8	435,121
Other transport equipment	92	6,086	107,939	–	114,895
Miscellaneous manufactured articles:					
Professional, scientific and controlling instruments; photographic and optical goods; clocks and watches	8,387	39,924	5,762	–	85,985
Other	5,395	18,878	19,518	2,018	127,299
Commodities and transactions n.e.c. *(b)*	3,103	1,596	336	18	5,557
Total	*555,105*	*359,783*	*214,892*	*188,731*	*2,376,330*

(a) From all sources. *(b)* Includes items deemed confidential.

13.3 PRICES

The prices of a wide range of commodities and services are recorded at regular intervals by the Australian Bureau of Statistics for the purpose of compiling various price indexes.

Price indexes aim to measure the degree of change in price levels of specified quantities and qualities of a list of selected items. It is traditional to select a certain year, known as the base year, and to equate the average aggregate price (of the list of items) in that year to 100. Index numbers then represent the change in prices from that period.

When index numbers for different places are compared (*e.g.* Consumer Price Index, Capital Cities) the only legitimate comparison is the relative change *i.e.* that prices increased or decreased more in one place than another. The actual levels of prices may differ substantially.

Retail price indexes

Consumer Price Index

The Consumer Price Index (CPI) measures price changes relating to the spending pattern of a large proportion of metropolitan employee households, where employee households have been defined as those households which obtain at least three–quarters of their total income from wages and salaries, excluding the top 10 per cent (in terms of income) of such households.

The CPI is a chain of linked indexes with significant changes in composition and weighting effected at regular intervals. During each period between links the weighting pattern remains unchanged. At times of linking the weighting pattern is brought up–to–date and the content of the index is reviewed.

The twelfth series of the index was introduced in the September quarter 1992 with a weighting pattern derived from the Household Expenditure Survey 1988–89 and a reference base 1989–90 = 100. There are 107 expenditure classes or groupings of like items within the index and each class has its own weight or measure of relative importance. In calculating the index, price changes for the various expenditure classes are combined using these weights.

The wide range of commodities and services in the CPI are arranged in eight major groups, with index numbers compiled for each of these groups as well as a total for all items. Index numbers for Adelaide for these individual groups and for 'All Groups' are recorded in the next table.

Consumer Price Index, Adelaide
(Base Year : 1989–90 = 100.0)

Quarter	Food	Clothing	Housing	Household equipment and operation	Trans-portation	Tobacco and alcohol	Health and personal care	Recrea-tion and educa-tion	All groups
1990 –									
Sept. . . .	102.0	102.1	103.5	103.8	104.3	105.6	107.4	103.3	103.8
Dec. . . .	103.8	103.5	105.3	105.5	111.2	111.8	111.0	105.1	106.9
1991 –									
Mar. . . .	104.6	103.8	103.8	105.6	106.5	113.7	116.0	105.8	106.7
June. . . .	104.9	104.8	103.7	106.8	105.9	116.8	119.0	105.0	107.3
Sept. . . .	104.9	105.1	102.3	107.1	109.2	117.3	121.2	106.2	108.0
Dec. . . .	105.9	104.9	102.3	107.6	110.5	118.1	124.2	106.8	108.8
1992 –									
Mar. . . .	106.4	105.2	99.8	107.3	110.9	119.2	134.1	108.8	109.5
June. . . .	106.9	106.1	97.3	108.1	111.2	119.6	131.6	108.9	109.4
Sept. . . .	107.3	106.0	95.4	108.1	113.7	126.5	131.5	108.9	110.1
Dec. . . .	108.1	107.2	94.0	108.1	115.1	130.4	132.2	109.9	110.7
1993 –									
Mar. . . .	111.3	107.2	94.0	106.7	114.9	131.3	136.8	111.7	111.6
June. . . .	110.4	107.6	93.8	107.3	116.1	136.4	138.9	112.3	112.3

Household expenditure surveys

During 1988–89, the ABS conducted a survey to obtain information about the expenditure patterns of private households.

A household is defined as a group of people who live together and have common provision for food and other essentials of living, and may contain more than one income unit.

Expenditure in this survey relates to the value of goods and services as they were acquired (*e.g.* bankcard purchases are counted as expenditure at the time of acquisition, and not at the time the bankcard bill was paid). Household expenditure surveys were previously conducted in 1974–75, 1975–76 and 1984.

The collection of data relating to expenditure at the household level is important in providing information for use in improving the representativeness of the items and the weighting pattern used to compile the Consumer Price Index.

Household Expenditure Survey, 1988–89

Particulars	*Adelaide*	*South Australia*
	Average weekly household expenditure ($)	
Commodity or service:		
Current housing costs	69.14	62.75
Fuel and power	13.23	13.04
Food and non–alcoholic beverages	86.68	85.27
Alcoholic beverages	15.62	15.67
Tobacco	7.05	6.66
Clothing and footwear	28.54	25.88
Household furnishings and equipment	30.12	28.74
Household services and operation	20.95	20.65
Medical care and health expenses	20.43	20.28
Transport	71.36	69.63
Recreation	54.36	54.13
Personal care	9.75	9.55
Miscellaneous commodities and services	34.84	35.88
Total commodity or service expenditure	*462.07*	*448.13*
Selected other payments:		
Income tax	108.19	100.51
Mortgage payments	6.42	5.40
Other capital housing costs	16.49	17.65
Superannuation and life insurance	15.99	15.15
Average weekly household income	588.08	557.80
Average weekly income per head *(a)*	229.72	217.04
Average weekly expenditure per head *(a)*	180.50	174.37
Average number of employed persons in household	1.2	1.2
Number of households in sample	662	815

(a) Per head estimates of average weekly expenditure or income are derived by dividing the weekly expenditure or income, of all household members, by the number of household members irrespective of age.

In 1988–89, the average weekly income of households in South Australia was $557.80, while average weekly expenditure was $448.13. Income tax payments accounted for a large part of the difference between income and expenditure as defined. The larger items of average weekly household expenditure in 1988–89 were food and non–alcoholic beverages ($85.27), transport ($69.63), current housing costs ($62.57) and recreation ($54.13).

To enable comparisons of expenditure patterns by income level, in the following table households have been ranked according to their income, and then divided into five groups of equal size, called quintiles.

Household Expenditure Survey : Household Expenditure and Characteristics by Income Quintile Group, 1988–89

	Weekly household gross income ($)					
	0–208	*209–368*	*369–606*	*607–887*	*888 or more*	
Expenditure group and household characteristics	*Lowest 20%*	*Second quintile*	*Third quintile*	*Fourth quintile*	*Highest 20%*	*All households*
Average weekly household income ($)	75.94	270.48	479.55	738.77	1,203.56	557.80
Average number of persons per household	1.51	2.22	2.78	3.05	3.25	2.57
Average age of household head (years)	58	56	42	40	42	48
Average number of employed persons in household	0.2	0.4	1.3	1.8	2.2	1.2

Household Expenditure Survey : Household Expenditure and Characteristics by Income Quintile Group, 1988–89 *(continued)*

Expenditure group and household characteristics	Weekly household gross income ($): 0–208 Lowest 20%	209–368 Second quintile	369–606 Third quintile	607–887 Fourth quintile	888 or more Highest 20%	All households
AVERAGE WEEKLY HOUSEHOLD EXPENDITURE ($) *(b)*						
Commodity or service:						
Current housing costs (selected dwelling)	28.08	41.18	66.88	86.02	90.17	62.75
Fuel and power	7.99	11.09	12.72	14.55	18.63	13.04
Food and non–alcoholic beverages	47.92	65.68	80.81	106.63	123.92	85.27
Alcoholic beverages	4.16	7.55	12.84	19.04	34.21	15.67
Tobacco	4.22	5.97	7.41	6.83	8.74	6.66
Clothing and footwear	11.67	13.34	21.74	37.78	44.31	25.88
Household furnishings and equipment	13.34	14.38	28.24	31.72	55.07	28.74
Household services and operation	11.57	16.78	19.12	25.43	30.03	20.65
Medical care and health expenses	8.99	12.01	22.17	24.24	33.41	20.28
Transport	19.67	36.21	64.85	105.44	120.03	69.63
Recreation	20.22	22.00	45.11	60.62	120.78	54.13
Personal care	4.41	6.08	7.61	11.76	17.68	9.55
Miscellaneous commodities and services	9.42	11.88	29.65	51.03	76.17	35.88
Total commodity and service expenditure	*191.64*	*264.16*	*419.15*	*581.10*	*773.15*	*448.13*
PROPORTION OF TOTAL EXPENDITURE ON COMMODITIES AND SERVICES (Per cent)						
Commodity or service:						
Current housing costs (selected dwelling)	14.7	15.6	16.0	14.8	11.7	14.0
Fuel and power	4.2	4.2	3.0	2.5	2.4	2.9
Food and non–alcoholic beverages	25.0	24.9	19.3	18.3	16.0	19.0
Alcoholic beverages	2.2	2.9	3.1	3.3	4.4	3.5
Tobacco	2.2	2.3	1.8	1.2	1.1	1.5
Clothing and footwear	6.1	5.0	5.2	6.5	5.7	5.8
Household furnishings and equipment	7.0	5.4	6.7	5.5	7.1	6.4
Household services and operation	6.0	6.4	4.6	4.4	3.9	4.6
Medical care and health expenses	4.7	4.5	5.3	4.2	4.3	4.5
Transport	10.3	13.7	15.5	18.1	15.5	15.5
Recreation	10.6	8.3	10.8	10.4	15.6	12.1
Personal care	2.3	2.3	1.8	2.0	2.3	2.1
Miscellaneous commodities and services	4.9	4.5	7.1	8.8	9.9	8.0
Total commodity and service expenditure	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

Further details on methodology and definitions may be obtained from the Information Paper *1988–89 Household Expenditure Survey* (6527.0). Detailed information on the Household Expenditure Survey can be obtained from the bulletin *1988–89 Household Expenditure Survey, Summary of Results* (6530.0).

Other price indexes

The following indexes covering non–retail sectors of the economy are published by the Australian Statistician:

Export Price Index,
Import Price Index,
Price Indexes of Copper Materials,
Price Index of Materials Used in Manufacturing Industries,
Price Indexes of Materials Used in Coal Mining,
Price Index of Articles Produced by Manufacturing Industry,
Price Index of Materials Used in House Building,
Price Index of Materials Used in Building Other than House Building,
House Price Indexes

Separate State figures are published for the last three indexes, and these are further explained below.

Materials used in building other than house building

This index measures changes in prices of selected materials used in the construction of buildings other than houses and low–rise flats. It is a fixed weights index, the composition of which is in accordance with the materials usage in building projects selected as representative for the purpose. Such usage was derived from reported values of each material used in construction of buildings other than houses commenced in the six State capital cities in the three years ended June 1977. The reference base of the index is the year 1979–80 = 100.0.

Prices are collected at the mid–point of the month to which the index refers, or as near as practicable. They relate to specified standards of each material and are obtained in all State capital cities from representative suppliers of materials used in building.

Index numbers for separate groups of materials and the 'All Groups' index for Adelaide are shown in the following table.

Price Index of Materials Used in Building Other than House Building, Adelaide
(Base of each Index : 1979–80 = 100.0)

Group	*1989–90*	*1990–91*	*1991–92*
Structural timber	261.7	269.7	258.6
Clay bricks	252.5	269.2	283.8
Ready–mixed concrete	219.8	225.6	216.6
Pre–cast concrete products	266.0	291.5	301.5
Galvanised steel decking, cladding etc.	227.6	240.2	236.2
Structural steel	236.2	242.2	236.1
Reinforcing steel bar, fabric and mesh	212.1	226.0	220.2
Aluminium windows	262.5	271.4	270.6
Steel windows, doors, louvres etc.	247.3	253.1	252.7
Builders hardware	278.1	292.1	306.3
Sand, aggregate and filling	206.0	224.8	232.0
Carpet	218.8	227.9	224.3
Paint	250.8	258.5	271.3
Non–ferrous pipes	212.7	221.3	220.2
Special purpose index *(a)*	235.6	246.1	245.5
All electrical materials	244.7	266.8	264.4
All mechanical services	240.3	256.9	263.7
All plumbing materials	241.5	252.6	253.2
All groups	*237.1*	*249.6*	*250.0*

(a) All groups excluding electrical installation materials and mechanical services components.

Further information on the method of compiling the index may be found in the publication *Price Index of Materials Used in Building Other than House Building* (6407.0).

Materials used in house building

This index measures changes in prices of selected materials used in the construction of houses. It is a fixed weights index, the composition of which is in accordance with the usage of materials in actual houses which were selected as representative for the purpose. The index does not purport to represent buildings of any kind other than houses.

Price Index of Materials Used in House Building, Adelaide
(Base Year: 1985–86 = 100.0)

Group	*1989–90*	*1990–91*	*1991–92*
All groups	129.7	136.2	135.5

House price indexes

These indexes reflect price movements for both established houses and project homes. The house price indexes are compiled by the ABS for use in calculating the Mortgage Interest Charges component of the CPI, however they are published separately because of the widespread interest in information specifically relating to housing.

Established houses are defined as detached residential dwellings on their own block of land where the houses can be new or secondhand. Price changes therefore relate to the house and land as a package. Project homes are houses that are built on a client's block of land and price changes only apply to the dwelling.

In Adelaide established house prices rose 1.5 per cent in the year to March 1993, while project homes fell 0.6 per cent in the same period.

House Price Indexes, Adelaide
(Base of each index: 1989–90 = 100.0)

Group	*1989–90*	*1990–91*	*1991–92*
Established house	100.0	106.2	106.5
Project home	100.0	104.5	105.4

Commodity prices

Retail prices of food

The next table shows the average retail prices of selected food items in Adelaide during recent years.

Average Retail Prices of Selected Food and Grocery Items, Adelaide
December Quarter
(Cents)

Item	*Unit*	*1990*	*1991*	*1992*
Milk, carton, supermarket sales	1 litre	82	84	86
Cheese, processed, sliced, wrapped	500 g	332	330	344
Butter	500 g	171	151	156
Bread, white loaf, sliced, supermarket sales	680 g	116	104	114
Biscuits, dry	250 g	125	117	136
Breakfast cereal, corn based	550 g	*(a)*238	250	292
Flour, self–raising	2 kg	190	186	198
Rice, medium grain	1 kg	103	98	104
Beef:				
Rib (without bone)	1 kg	608	569	591
Rump steak	1 kg	1,092	1,085	1,063
Corned silverside	1 kg	622	630	632
Sausages	1 kg	366	352	367
Lamb:				
Leg	1 kg	440	423	461
Loin chops	1 kg	591	540	584
Forequarter chops	1 kg	415	405	436

Average Retail Prices of Selected Food and Grocery Items, Adelaide
December Quarter *(continued)*
(Cents)

Item	*Unit*	*1990*	*1991*	*1992*
Pork:				
Leg	1 kg	598	601	603
Loin chops	1 kg	742	746	754
Chicken, frozen	1 kg	328	333	318
Bacon, middle rashers, pre–packed	250 g	289	254	289
Salmon, pink	210 g	266	211	244
Potatoes	1 kg	93	77	95
Onions	1 kg	140	83	118
Peaches, canned	825 g	172	182	183
Peas, frozen	500 g	132	131	118
Eggs (55 grams)	doz.	223	176	191
Sugar, white	2 kg	201	170	153
Tea	250 g	148	144	156
Coffee, instant, jar	150 g	422	410	409
Tomato sauce	600 mL	147	141	156
Margarine, polyunsaturated	500 g	148	145	144

(a) 500g.

Other commodity prices

South Australian prices of agricultural products are shown in Part 10.1, Rural Industries and additional details for wheat, wool and livestock are given under the appropriate headings in that Part.

Further references

Additional information may be found in the following ABS publications:

6401.0 *Consumer Price Index, Australia*
6407.0 *Price Index of Materials Used in Building other than House Building, Australia*
6408.0 *Price Index of Materials Used in House Building, Australia*
6416.0 *House Price Indexes, Australia*
6419.0 *Producer and Foreign Trade Price Indexes – Concepts, Sources and Methods*
6440.0 *A Guide to the Consumer Price Index, Australia*
6461.0 *The Australian Consumer Price Index – Concepts, Sources and Methods*
6527.0 *1988–89 Household Expenditure Survey, Australia*
6530.0 *1988–89 Household Expenditure Survey, Australia: Summary of Results*

Chapter 14

TRANSPORT AND COMMUNICATION

14.1 LAND TRANSPORT

Roads

Roads in South Australia are officially classified as national highways, arterial roads, and local roads; these classifications have been determined by the Commonwealth Government in consultation with the South Australian Government.

The Department of Road Transport is the road authority for South Australia. Its key objective is to serve the transport needs of the community by developing and managing the road network and its use as an integrated part of the transport system. Responsibility for the construction and maintenance of roads is shared between the Department and the various Local Government Authorities. The Department is responsible for the construction, reconstruction, maintenance and improvement of the whole national highway network in the State (2,730 kilometres), nearly all of the arterial road network (9,537 kilometres) and 12.5 per cent (10,350 kilometres) of the local road network. Most of the local roads maintained by the Department are located in the unincorporated areas of the State.

The following table shows the length of roads according to class of road and type of surface at 30 June 1993.

Length of Roads : Type of Surface, 30 June 1993
(Kilometres)

	Type of surface		
Class of road	*Sealed*	*Unsealed*	*Total*
National highways *(a)*	2,730	–	2,730
Arterial roads *(b)*:			
Rural	8,158	479	8,637
Urban	938	–	938
Local roads *(c)*:			
Rural	6,782	68,463	75,245
Urban	6,434	831	7,265
Total	*25,042*	*69,773*	*94,815*

(a) Roads declared by the Commonwealth Minister for Transport to be national highways under the provisions of the *Australian Land Transport Development Act 1988* (Cwlth). They are selected roads linking Adelaide with other State capital cities including Darwin and Canberra.
(b) Roads declared by the Commonwealth Minister for Transport to be arterial roads under the provisions of the *Australian Land Transport Development Act 1988* (Cwlth).
(c) Roads not included in above categories.

The Department of Road Transport maintains approximately 1,300 bridges and major culverts throughout the State. The River Murray in South Australia is bridged at five locations (four of which are on two interstate routes) and the Department provides free and continuous ferry services across the river at thirteen places. A free ferry service also operates across Cooper Creek, on the Birdsville Track in the far north of the State, when the creek is in flood.

Road finance

For South Australia, the main sources of funds for road works during 1992–93 were:

(a) the net proceeds of fees imposed by the State Government for the registration of motor vehicles and the licensing of drivers;

(b) an allocation from the collection of motor fuel licence fees levied pursuant to the *Business Franchise (Petroleum Products) Act 1979*;

(c) Commonwealth Government grants to the States and Territories pursuant to the *Australian Land Transport Development Act 1988* (Cwlth);

(d) Commonwealth Government grants to the States and Territories pursuant to the *Interstate Road Transport Act 1985* (Cwlth) and the *Interstate Road Transport Charges Act 1985* (Cwlth);

(e) advances for capital purposes from the State Consolidated Account;

(f) property rates and other levies imposed by municipal and district councils; and

(g) rental income from properties owned by the Department of Road Transport and proceeds from the sale of Departmental land and plant.

Railways

Railway systems in South Australia are operated by both the Commonwealth and South Australian Governments. Management of the Australian National railways is vested in the Australian National Railways Commission (ANRC).

In August 1975 the State Government approved the transfer of non–urban railways to the Australian National Railways Commission, although the actual transfer did not become operative until 1 March 1978.

At 30 June 1992 ANRC operated 5,775 route kilometres on mainland Australia, of which 4,872 is in South Australia. This included part of the 1,435 mm gauge Trans–Australia Railway from Kalgoorlie to Broken Hill; the 1,435 mm gauge Tarcoola to Alice Springs line; and other 1,600 mm and 1,067 mm gauge lines, including the isolated Eyre Peninsula system (1,067 mm gauge).

At 30 June 1993 the State Transport Authority (STA) operated 120 route kilometres of metropolitan (1,600 mm gauge) rail track in South Australia.

State Transport Authority

The State Transport Authority is constituted as a body corporate under the *State Transport Authority Act 1974*.

The main role of the State Transport Authority set out in its corporate charter is:

(a) to provide passenger transport services for the people of the Adelaide Metropolitan area, through an integrated network of bus, tram and rail routes which offers reasonable access, with emphasis on the large numbers of people who travel regularly and have similar destinations; and

(b) in accordance with Government policy and with the resources available, the Authority will provide a level and standard of service, consistent with demand, in the most cost effective manner. It will actively plan and develop services and facilities required to serve the needs of its market.

From July 1975, by virtue of the *Railways (Transfer Agreement) Act 1975* and the *Railways Agreement (South Australia) Act 1975* (Cwlth), the Australian National Railways Commission acquired the non–metropolitan portion of the South Australian Railways, *i.e.* the country and interstate passenger services and all freight services, subject to a number of conditions and controls exercised by the State. Facilities within the metropolitan area concerned with the handling of freight and the servicing and repair of rollingstock also became the property of the Commission.

The STA railway system extends generally from Adelaide to the extremities of the metropolitan area at Outer Harbor, Gawler Central, Belair and Noarlunga Centre and includes interconnecting loops and branch lines. Under the terms of the Act the Commission and the Authority have the right to run their rollingstock over the railways of each other.

State Transport Authority, Selected Non–financial Details

Item	*1990–91*	*1991–92*	*1992–93*
	'000		
Passenger journeys *(a)*	56,865	52,802	49,090
Traffic vehicle kilometres run:			
Bus	40,039	39,475	38,189
Tram	720	688	733
Rail	6,730	7,374	5,609
	NUMBER		
Total route kilometres:			
Bus	1,057.20	1,080.60	1,121.40
Tram	10.80	10.80	10.80
Rail	121.53	120.13	119.63
Vehicle fleet at 30 June:			
Buses *(b)*	739	744	714
Tramcars	21	21	21
Rail cars	130	125	108
Number of employees at 30 June *(c)*	3,327	3,195	3,041

(a) Initial passenger boardings. *(b)* Includes charter and tour buses. *(c)* Includes staff made available by Australian National.

Other road passenger transport

Private bus services

Legislation covering the regulation of private bus operations in South Australia is included in Part IVB of the *Road Traffic Act 1961*, and is enforced by the Department of Transport.

Private operations are regulated *via* a licensing system which includes the issuing of licences authorising route service, tour and charter, community bus, school children and other special categories. Route service licences have a currency of five years, with other licences having tenures of twelve months.

Country town bus services

Commencing in May 1975, the State Government offered financial assistance through local government to urban bus services outside the metropolitan area. Under the arrangement, financial responsibility for the provision of bus services is vested in the local government authority, but the State Government contributes two–thirds of the operating loss.

Councils have the option of acquiring local bus fleets or arranging for a local bus proprietor to provide the bus service under contract. In the case of the contract system, the fare revenue is retained by the local government authority and the contractor is paid an agreed sum per kilometre to operate buses on routes and within specified timetables determined by a three–person management committee. The committee consists of an elected Council representative, the chief executive officer or his deputy, and a representative of the Minister of Transport.

Contract services are operated in Port Pirie, Port Augusta, Port Lincoln, Mount Gambier and Murray Bridge. In Whyalla the bus service is municipally owned and operated.

Interstate and country services

Regular interstate coach services and special charters and tours operate to all mainland States. In addition, a network of bus route services operates on radial routes from Adelaide to all parts of the State. These services are provided by thirteen private companies, under licences issued by the Office of Transport Policy and Planning. Most are operated from two adjacent terminals in Franklin Street, Adelaide.

Intrastate passenger route services on all routes are controlled by the Office of Transport Policy and Planning. Generally, pick–up and set–down rights on the routes are non–competitive with other route service operations. The Office of Transport Policy and Planning also regulates tour, charter and school children runs etc. within the State.

Taxi–cabs

The *Metropolitan Taxi–Cab Act 1956*, administered by the Metropolitan Taxi–Cab Board, is the governing legislation providing for the control of taxi–cabs and hire cars within the Metropolitan Planning Area as defined by Section 5(1) of the *Planning and Development Act 1966*, together with the whole of the Municipality of Gawler. The Board is responsible for the granting of licences or permits to operate taxi–cabs and the charging of permit fees.

Licences issued at 31 March 1993 include taxi–cabs, 927 and hire cars, 209. Vehicle drivers licences current totalled 3,980.

In areas not under the control of the Metropolitan Taxi–Cab Board, taxi licences are issued by local government authorities under the provisions of the Local Government Act.

Motor vehicles

Control of road traffic

Legislation covering the registration of motor vehicles, licensing of drivers and third party insurance in South Australia is contained in the *Motor Vehicles Act 1959*.

The present legislation for the control of road traffic in South Australia is set out in the *Road Traffic Act 1961* and the *Motor Vehicles Act 1959*.

Registration of motor vehicles

New motor vehicle registrations during the financial years 1990–91 to 1992–93 are shown in the following table.

New Motor Vehicle Registrations[(a)]

Type of vehicle	*1990–91*	*1991–92*	*1992–93*
Passenger vehicles	34,753	32,351	32,894
Light commercial vehicles	4,760	4,296	4,555
Trucks – Rigid	1,284	582	519
– Articulated	123	202	224
– Non–freight carrying *(b)*	255	139	103
Buses	197	119	176
Motor cycles	1,466	1,375	1,469
Total	*42,838*	*39,059*	*39,940*

(a) Includes Commonwealth Government owned vehicles except defence services vehicles.
(b) Includes tow trucks, fire engines, ambulances and hearses.

Under the provisions of the *Motor Vehicles Act 1959* all motor vehicles, unless specifically exempted, must be registered with the Registrar of Motor Vehicles at the Motor Registration Division of the Department of Transport before being driven on any road.

Motor Vehicles on Register[(a)] at 30 June

Type of vehicle	*1990*	*1991*	*1992*
	'000		
Passenger vehicles	698.9	680.0	719.6
Other motor vehicles	154.9	147.1	141.8
Motor cycles	29.7	30.7	28.1
Total on register	*883.5*	*857.8*	*889.5*

Motor Vehicles on Register[(a)] at 30 June *(continued)*

Type of vehicle	*1990*	*1991*	*1992*
PER 1,000 ESTIMATED RESIDENT POPULATION			
Motor vehicles	613.9	590.3	610.1
'000			
Plant and equipment	6.8	6.9	9.2
Trailers and caravans	210.6	210.5	214.9
Traders plates	3.2	3.2	*(b)*3.3

(a) Includes Commonwealth Government owned vehicles except defence services vehicles.
(b) At 31 December.

Drivers licences

From 3 June 1991, the following classes of drivers licences have applied in South Australia:

Class Car — Any motor vehicle the gross vehicle mass (GVM) of which does not exceed 4.5 tonnes (except a motor omnibus designed or adapted to carry more than 12 persons (including the driver), an articulated motor vehicle, a heavy trailer combination, or a motor cycle).

Class LT — Any motor vehicle the GVM of which does not exceed 15 tonnes (except a motor omnibus designed or adapted to carry more than 12 persons (including the driver), an articulated motor vehicle, a heavy trailer combination, or a motor cycle).

Class HT — Any motor vehicle (except a motor omnibus designed or adapted to carry more than 12 persons (including the driver), an articulated motor vehicle, a heavy trailer combination, or a motor cycle).

Class LA — Any motor vehicle (except a motor omnibus designed or adapted to carry more than 12 persons (including the driver), an articulated vehicle the gross combination mass limit of which exceeds 24 tonnes, a heavy trailer combination the hauling unit of which has a gross combination mass limit exceeding 24 tonnes, or a motor cycle).

Class HA — Any motor vehicle (except a motor omnibus designed or adapted to carry more than 12 persons (including the driver), a B Double, a road train, or a motor cycle).

Class RT — Any motor vehicle (except a motor omnibus designed or adapted to carry more than 12 persons (including the driver) or a motor cycle).

Class DA — Any motor vehicle (except a motor omnibus designed or adapted to carry more than 12 persons (including the driver), a road train, or a motor cycle).

Class Bike–date	Any motor cycle which has an engine capacity not exceeding 250 c.c.
Class Bike	Any motor cycle.
Class SB	Any motor omnibus designed or adapted to carry no more than 30 persons including the driver.
Class LB	Any motor omnibus the GVM of which does not exceed 15 tonnes except an articulated omnibus.
Class HB	Any motor omnibus except an articulated motor omnibus.
Class AB	Any motor omnibus.
Class Wheelchair	Any motorised wheelchair.

From 30 October 1989 the minimum age for the issue of a probationary driver's licence was raised from 16 years to 16 years 6 months. The minimum age for the issue of a learner's permit remained at 16 years. Applicants for a probationary driver's licence, who are aged under 18 years, are subject to probationary conditions until age 19, or in other cases, for a period of twelve months.

Drivers and riders licences current at 30 June 1993 totalled 947,134. The number in force first exceeded 100,000 in 1931, exceeded 300,000 by 1957, 500,000 by 1969, and had exceeded 800,000 by 1984.

Third Party (bodily injury) insurance

Under the *Motor Vehicles Act 1959* every motor vehicle driven on a road, unless specifically exempted, must be covered by an insurance policy. This policy insures the owner of the motor vehicle and any other person who at any time drives the vehicle in respect of all liability that may be incurred in respect of the death of, or bodily injury to, any person caused by, or arising out of the use of the vehicle in any part of Australia.

A person claiming damages in respect of death or bodily injury caused by negligence in the use of an uninsured motor vehicle on a road may bring an action for the recovery of those damages against the nominal defendant appointed by the Minister of Transport and published in the Government Gazette. Payments made by the nominal defendant are recoverable from the driver of the motor vehicle or any person liable for the negligence of that driver.

Motor vehicle usage

A survey was conducted throughout Australia in late 1991 for the purpose of gathering information on the usage of motor vehicles. The period covered by the survey was for the twelve months ended 30 September 1991. Previous surveys were conducted in 1963, 1971, 1976, 1979, 1982, 1985 and 1988.

The survey population (motor vehicles on the register), from which the sample was drawn, was extracted from the registration systems of the Commonwealth Government and State motor vehicle registration authorities. It was then stratified according to body type and characteristics such as age, weight and engine capacity of vehicle.

Of the vehicles selected for the 1991 sample, 58 per cent were commercial vehicles; 27 per cent were private passenger vehicles and 15 per cent buses. The emphasis on commercial vehicles was necessary because of the diverse usage characteristics of commercial vehicles and because a major interest of users is road freight transport.

Additional details relating to South Australia and Australia are shown in the bulletin *Survey of Motor Vehicle Use, Australia, 30 September 1991* (9208.0).

Motor Vehicle Usage : Average Annual Distance Travelled
Twelve Months Ended 30 September 1991

	Average annual distance travelled		*Average annual distance travelled for business purposes*	
Type of vehicle	*'000 km*	*SE%*	*'000 km*	*SE%*
Passenger vehicles	13.5	(3)	11.5	(9)
Motor cycles	4.7	(6)	2.4	(14)
Light commercial vehicles	15.6	(4)	14.1	(5)
Rigid trucks	15.4	(8)	15.9	(8)
Articulated trucks	80.0	(2)	80.3	(2)
Other truck types	14.6	(21)	16.4	(21)
Buses	46.8	(4)	49.3	(4)
Total	*13.9*	*(3)*	*14.1*	*(5)*

Motor Vehicle Usage : Average Rate of Fuel Consumption
Twelve Months Ended 30 September 1991

	Petrol		*Diesel or distillate*		*LPG/LNG dual fuel*	
Type of vehicle	*Litres per 100 km*	*SE%*	*Litres per 100 km*	*SE%*	*Litres per 100 km*	*SE%*
Passenger vehicles	12.2	(1)	15.3	(13)	15.4	(5)
Motor cycles	6.3	(5)	–	(–)	–	(–)
Light commercial vehicles	13.9	(2)	11.7	(4)	18.3	(9)
Rigid trucks	25.3	(5)	26.9	(6)	34.4	(9)
Articulated trucks	47.1	(25)	51.1	(1)	–	(–)
Other truck types	21.3	(7)	23.7	(14)	24.8	(4)
Buses	25.8	(9)	37.9	(1)	41.1	(3)
Total	*12.4*	*(1)*	*29.3*	*(3)*	*16.2*	*(5)*

Census of motor vehicles

A census of motor vehicles on the register in Australia at 30 September 1991 was completed during 1992. The following table classifies motor vehicles on register by type of vehicle and year of manufacture at 30 September 1991 for South Australia.

Motor Vehicles on Register : Type of Vehicle and Year of Manufacture
30 September 1991(a)

Year of manufacture	Type of vehicle						
	Passenger vehicles	Light commercial vehicles	Rigid trucks	Articulated trucks	Other trucks	Buses	Total (a)
Before 1971	52,197	8,138	6,574	223	512	187	67,831
1971–1974 .	75,754	12,140	3,370	392	1,001	235	92,892
1975–1978 .	130,820	20,734	5,146	883	1,458	572	159,613
1979–1982 .	150,369	24,666	4,667	1,011	536	575	181,824
1983–1986 .	162,240	27,419	5,412	1,021	1,429	807	198,328
1987	28,700	3,769	799	280	227	169	33,944
1988	33,404	4,853	945	318	317	155	39,992
1989	36,096	5,711	1,043	313	481	151	43,795
1990	39,580	5,667	1,039	260	372	181	47,099
1991	21,313	2,962	378	120	90	90	24,953
Total (incl. not stated)	*730,783*	*116,324*	*29,695*	*4,829*	*6,479*	*3,140*	*891,250*

(a) Excludes motor cycles (31,445).

Road accident prevention

The Department of Road Transport is responsible for the development of road safety policy through one of its organisational units, the Office of Road Safety.

A Road Safety Management and Coordination Group, comprising chief executives from Road Transport, Education, and Police Departments, the South Australian Health Commission, the Office of Transport Policy and Planning and a nominee of the Local Government Association coordinates a government–wide effort in road safety by the development of a Road Safety Strategic Plan.

The Road Safety Advisory Council remains an advisory body to the Minister of Transport Development and conducts periodic forums on road safety issues.

Road safety programs are conducted and/or implemented by the Department of Road Transport, local government authorities, Police and Education Departments, South Australian Health Commission, and the National Health and Medical Research Council's Road Accident Research Unit.

Road traffic accidents

Statistics of road traffic accidents are compiled from reports made to members of the South Australian Police Department by persons involved in such accidents.

For the purpose of the following statistics, only those casualty accidents which occurred because of the presence of a moving vehicle on a road or other public thoroughfare (*e.g.* public car park, beach) and which also involved a fatality or the hospitalisation of injured persons have been included. Thus the casualty statistics refer to:

(a) the death of any person within a period of thirty days of the accident; or

(b) bodily injury to any person to an extent requiring hospitalisation.

The following table shows summary details of road traffic accidents for the years 1987 to 1991. During 1991 the total number of road traffic accidents decreased by 17.9 per cent (from 2,112 in 1990 to 1,733 in 1991). The number of accidents which resulted in fatalities decreased by 10.8 per cent (from 186 in 1990 to 166 in 1991).

Road Traffic Accidents

Year	Total accidents (a)	Fatal accidents	Persons killed	Persons injured	Rate per 100,000 of mean population: Total accidents	Rate per 100,000 of mean population: Persons killed	Rate per 100,000 of mean population: Persons injured
1987	2,406	230	256	2,912	173	18	209
1988	2,140	206	223	2,590	152	16	184
1989	2,132	201	222	2,492	150	14	175
1990	2,112	186	225	2,397	148	16	167
1991	1,733	166	184	2,058	120	13	142

(a) Includes only those accidents involving a fatality or the hospitalisation of injured persons.

Drivers (including motor cyclists) under twenty–one years of age at 30 June 1991, accounted for 22 per cent of drivers killed and 19 per cent of drivers injured during 1991. For drivers aged twenty–one to twenty–nine years deaths were 24 per cent and injuries 28 per cent. Pedestrians sixty years and over accounted for 32 per cent of pedestrians injured and 63 per cent of pedestrians killed.

In the following table, the types of road users killed and injured are shown according to age groups for 1991.

Road Traffic Accidents : Age Groups of Casualties, 1991

Age group of casualty (years)	Drivers of motor vehicles	Motor cyclists	Pedal cyclists	Passengers (a)	Pedestrians	All other	Total
	PERSONS KILLED						
Under 5	1	–	–	1	–	–	2
5–6	–	–	1	–	–	–	1
7–16	3	–	1	5	4	–	13
17–20	13	6	–	10	1	–	30
21–25	14	5	3	10	2	–	34
26–29	5	1	1	2	–	–	9
30–39	16	6	–	8	1	–	31
40–49	5	2	–	3	1	–	11
50–59	9	1	1	2	–	–	13
60 and over	14	1	3	5	15	–	98
Not stated	1	–	–	1	–	–	2
Total	*81*	*22*	*10*	*47*	*24*	–	*184*

Road Traffic Accidents : Age Groups of Casualties, 1991 *(continued)*

Age group of casualty (years)	Drivers of motor vehicles	Motor cyclists	Pedal cyclists	Pass-engers (a)	Pedes-trians	All other	Total
			PERSONS INJURED				
Under 5	–	–	–	20	8	–	28
5–6	–	–	1	8	6	–	15
7–16	13	10	33	70	44	1	171
17–20	140	54	14	81	23	–	312
21–25	131	58	15	70	14	–	288
26–29	90	45	3	34	6	–	178
30–39	147	50	15	41	15	–	268
40–49	85	11	6	32	11	–	145
50–59	71	6	6	34	7	–	124
60 and over .	99	4	2	43	39	–	187
Not stated ..	100	25	11	181	25	–	342
Total....	*876*	*263*	*106*	*614*	*198*	*1*	*2,058*

(a) Passengers include pillion motor cyclists.
Source: Department of Road Transport, Office of Road Safety.

The following table shows casualties by type of road user in each of the three years to 1991.

Road Traffic Accidents : Casualties

Year	Drivers of motor vehicles	Motor cyclists	Pedal cyclists	Passen-gers (a)	Pedes-trians	All other	Total
			PERSONS KILLED				
1989	84	27	13	51	47	–	222
1990	88	24	6	75	32	–	225
1991	81	22	10	47	24	–	184
			PERSONS INJURED				
1989	1,072	305	151	718	244	2	2,492
1990	991	318	177	635	275	1	2,397
1991	876	263	106	614	198	1	2,058

(a) Passengers include pillion motor cyclists.
Source: Department of Road Transport, Office of Road Safety.

14.2 SEA TRANSPORT

Harbours

The South Australian commercial ports system comprises the following ports:

(a) State commercial deep sea ports

Port Adelaide
Port Bonython
Port Giles
Port Lincoln
Port Pirie
Thevenard
Wallaroo

(b) Privately operated commercial deep sea ports

Whyalla	Port Stanvac
Ballast Head	Proper Bay
Ardrossan	

The Department of Marine and Harbors also maintains jetties and wharves for promenade and fishing purposes at many other minor ports no longer used by commercial vessels.

The control of all harbours (including the River Murray) is vested in the Minister of Marine; he is responsible for the control of navigation within harbours and for all harbour facilities including lights, buoys, beacons, bulk loading plants and fishing boat accommodation, and in addition for the control of the competency of masters and others in charge of intrastate vessels. Relevant legislation administered by the Department of Marine and Harbors includes the *Harbors Act 1936*, the *Marine Act 1936*, the *Prevention of Pollution of Waters by Oil Act 1961* and the *Boating Act 1974*.

In 1992–93 the State–owned ports handled 12,568,000 tonnes of cargo or approximately 61.9 per cent of the total tonnage of 20,315,000 tonnes passing through all the ports in South Australia.

The Department of Marine and Harbors is responsible for the provision of a shipping service between Port Adelaide and Kangaroo Island/Port Lincoln.

Shipping

Control of shipping

The Commonwealth Parliament is empowered under the Constitution to make laws in respect of trade and commerce with other countries and among the States.

Navigation and shipping are regulated under the *Navigation Act 1912* (Cwlth) which applies to ships registered in Australia (except those engaged solely in the domestic trade of any one State) and other British ships whose first port of clearance and whose port of destination are within Australia. Other shipping Acts under the trade and commerce power are the *Sea–Carriage of Goods Act 1924* (Cwlth), the *Seamen's Compensation Act 1911* (Cwlth), the *Seamen's War Pensions and Allowance Act 1940* (Cwlth), the *Australian Coastal Shipping Commission Act 1966* (Cwlth), the *Australian Coastal Shipping Agreement Act 1956* (Cwlth) and the *Stevedoring Industry Act 1956* (Cwlth).

Shipping in South Australia is controlled by the *Navigation Act 1912* (Cwlth) and, where this does not apply, by the *Harbors Act 1936* and the *Marine Act 1936*. Both of the State Acts are administered by the Department of Marine and Harbors.

Registration of ships

The Australian Register of Ships was established in Canberra by the Commonwealth Government and became operative on 26 January 1982. It replaced the British Register of Ships, which had become inappropriate as a means of registering Australian ships. Registration of a ship provides proof of nationality and ownership, and enables the registration of encumbrances over a ship.

Overseas shipping

Overseas shipping cargo statistics are compiled from returns submitted by shipping companies, or their representatives, to Customs Houses at each port in South Australia.

The statistics relate to overseas ships calling at or departing from South Australian ports for the purpose of carrying cargo from or to overseas ports. Excluded are naval ships, yachts and other craft used for pleasure, foreign fishing ships that neither load nor discharge cargo, geophysical, oceanographic research and seismic survey ships, offshore oil drilling rigs and related service ships, Australian registered fishing ships operating from Australian ports and all ships of 200 registered net tonnes and under. Cargo statistics are recorded in gross weight tonnes. Gross weight is the total weight of cargo, excluding the weight of containers.

Of the 816 commercial vessels arriving at South Australian ports in 1992, 450 arrived at Port Adelaide, 71 at Port Pirie, 65 at Port Stanvac, 64 at Port Lincoln, 49 at Whyalla, 41 at Wallaroo, 27 at Port Giles, 26 at Port Bonython and 23 at Ardrossan.

Shipping : Overseas Cargo Discharged and Loaded

	Discharged		*Loaded*	
Year	*Gross weight*	*Value*	*Gross weight*	*Value*
	'000 tonnes	*$m*	*'000 tonnes*	*$m*
1989	2,490	1,026	5,275	1,818
1990	2,189	1,278	6,665	2,056
1991	2,875	1,402	7,230	1,963
1992	3,547	1,856	7,635	2,454

Cargo handled

The South Australian Department of Marine and Harbors records details of cargo handled at the larger ports in this State and the following table shows details for each of the last three years.

Cargo Handled at Major Ports
('000 tonnes)

Port	*1990–91*	*1991–92*	*1992–93*
Ardrossan	1,024	1,073	1,152
Ballast Head	247	205	16
Kingscote	48	43	45
Klein Point	726	1,229	1,540
Port Adelaide	3,883	4,087	5,114
Port Bonython	1,954	2,040	1,641
Port Giles	312	217	393
Port Lincoln	1,329	1,382	1,100
Port Pirie	1,165	1,129	888
Port Stanvac	4,223	3,592	3,844
Proper Bay	15	36	–
Rapid Bay	214	12	–
Thevenard	1,218	1,193	1,291
Wallaroo	483	685	557
Whyalla	2,586	2,674	2,734
Total	*19,427*	*19,597*	*20,315*

Distances to overseas ports

Distances in kilometres from Port Adelaide to principal overseas ports are shown in the following table.

Distances by sea from Port Adelaide to the ports of other Australian capital cities are shown on page 2.

Distances from Port Adelaide to Principal Overseas Ports

Port Adelaide to:	*Kilometres*	*Port Adelaide to:*	*Kilometres*
Africa:		North America:	
Cape Town	10,377	East Coast;	
Asia:		Baltimore	*(a)*23,135
Colombo	7,982		*(c)*19,059
Djakarta	5,643	Montreal	*(a)*23,541
Hong Kong	8,856		*(c)*21,368
Singapore	6,510	New York	*(a)*22,961
Yokohama	9,780		*(c)*19,200
Europe:		West Coast;	
Liverpool	*(a)*21,630	San Francisco	13,653
	*(b)*19,774		
London	*(a)*21,705	Vancouver	14,357
	*(b)*19,839	Central America:	
Marseilles	*(a)*21,144	Panama	15,385
	*(b)*16,688	South America:	
Naples	*(a)*21,663	East Coast;	
	*(b)*15,940	Buenos Aires	*(d)*14,388
New Zealand:		Rio de Janeiro	*(d)*15,901
Auckland	3,769	West Coast;	
Wellington	3,482	Valparaiso	12,353

(a) Via Cape Town. *(b) Via* Suez Canal. *(c) Via* Panama Canal. *(d) Via* Cape Horn.

14.3 AIR TRANSPORT

Control of civil aviation

In Australia, civil aviation is subject to the *Air Navigation Act 1920* (Cwlth) and the *Civil Aviation Act 1988* (Cwlth), and to regulations made under those Acts.

The present regulations, administered by the Department of Transport and Communications, the Civil Aviation Authority and the Federal Airports Corporation, cover the registration of aircraft and the issue of certificates of airworthiness, the licensing of aircraft services, aircraft operating crews, aerodromes, flying training schools, and the rules of the air.

These authorities are responsible for the provision and operation of air traffic services and rescue and fire fighting services and have assumed responsibility for the coordination of search and rescue operations. They are also responsible for the prevention of undesirable effects of air traffic on the environment and of unlawful interference with aircraft and aviation facilities.

Aerodromes

The main airport in South Australia is the Adelaide Airport located six kilometres west of the city. The airport has both a domestic and an international terminal, the latter having scheduled services to Europe, the Far East and New Zealand.

Since the opening of the Adelaide Airport the aerodrome at Parafield, about eighteen kilometres north of Adelaide, has been restricted principally to use by light aircraft.

Adelaide and Parafield airports are owned and operated by the Federal Airports Corporation (FAC). The FAC was established on 1 January 1988 by the Commonwealth Government and is a statutory body designed to place the airports, with their terminals, runways and associated facilities on a proper commercial basis.

In July 1993 there were 32 licensed aerodromes in South Australia, including those operated by the FAC. Of these, 21 receive some form of regular public transport service.

Under current Civil Aviation Regulations introduced in December 1992, the number of licensed aerodromes could be significantly reduced. Only aerodromes used by aircraft with more than 30 passenger seats, engaged in regular public transport operations, will need to be licensed.

In addition to the civil aerodromes there are two major aerodromes, one at Woomera controlled by the Department of Defence through the Defence Research Centre, and the other at Salisbury (Edinburgh Airfield), which are used by aircraft associated with trials operations. Edinburgh Airfield is also the base for two Royal Australian Air Force maritime squadrons.

Aircraft on register

At 30 June 1992 the number of registered aircraft based in the South Australia–Northern Territory Region was 789 for general aviation and 271 for transport.

General air services

International air services commenced through Adelaide on 2 November 1982. At June 1992, there were seven international carriers, Qantas, British Airways, Singapore Airlines, Garuda Airlines, Malaysian Airlines, Air New Zealand and Japan Airlines, providing international services to Adelaide. These services link Adelaide with major centres including Singapore, London, Auckland, Bangkok, Los Angeles and Tokyo.

Domestic air services to South Australia are provided by Ansett Transport Industries (Operations) Ltd, operating as Ansett Australia, and Australian Airlines. At June 1992, the airlines provided direct services from Adelaide to the following major centres: Alice Springs, Brisbane, Canberra, Coolangatta, Melbourne, Perth and Sydney. In addition, there were nine commuter operators providing services in South Australia at June 1992.

The commuter sector of the Australian aviation industry is defined as those operators performing regular public transport services whose fleet contain exclusively aircraft with a maximum seating capacity of 38 or a maximum payload of 4,200 kilograms. Commuters served twenty South Australian ports at June 1992, as well as a number of isolated communities and stations on mail/parcel runs.

Principal Airports : Traffic Data

Airport	*1989–90*	*1990–91*	*1991–92*
	PASSENGERS *(a)*		
Adelaide	1,653,733	2,265,992	2,805,780
Adelaide International	168,259	184,874	193,658
Ceduna	4,460	5,240	5,328
Kingscote	27,943	37,213	40,753
Mount Gambier	49,603	56,713	48,465
Port Lincoln	71,814	69,371	76,827
Whyalla	38,836	48,973	47,003
	FREIGHT–TONNES *(a)*		
Adelaide	8,888	13,245	14,061
Adelaide International	6,999	8,007	8,914
Ceduna	5	3	1
Kingscote	–	35	33
Mount Gambier	47	36	26
Port Lincoln	42	35	36
Whyalla	23	16	20
	AIRCRAFT MOVEMENTS		
Adelaide	39,741	47,957	54,910
Adelaide International	2,153	2,220	2,394
Ceduna	621	625	681
Kingscote	3,388	4,415	9,006
Mount Gambier	6,447	7,674	6,374
Port Lincoln	5,867	5,846	5,982
Whyalla	2,750	4,250	4,094

(a) Includes all domestic and commuter services.

14.4 COMMUNICATION

Postal services

Australia Post is a business enterprise wholly owned by the Commonwealth of Australia and established under the *Australian Postal Corporation Act 1989*. The Corporation is run as a commercial enterprise and is entirely self–funding. Its policies are set by a Board of Directors accountable to the Government for the Corporation's performance. Australia Post operates letter and parcel delivery services within Australia and internationally, and it provides a range of related services. The Act required Australia Post to provide all Australians with access to a uniform rate delivery service for Standard Letters. As a business enterprise, Australia Post operates in a highly–competitive market for its courier, parcel and retail services.

Australia Post provides agency services for other organisations such as the Commonwealth Bank, private sector businesses and State and Commonwealth Government services. Electronic counter services are being extended to offer customers convenient access to these services for paying bills and transferring funds at their local post office. Known as the One Spot Billpay Service, this facility has been installed at over 220 Post Offices and Post Office Agencies, and licensed Post Offices throughout South Australia and the Northern Territory.

Recent advances in mail processing have been the introduction of Optical Character Reading (OCR) and Flats Sorting Machines (FSM) which collectively have streamlined the processing of articles through the mail exchange.

At 30 June 1993 there were 3,475 persons employed in postal services in South Australia and the Northern Territory comprising 2,461 full–time staff, 350 part–time staff, 421 Post Office Agency staff and 243 mail contractors.

Postal articles handled

Details of articles handled by post offices in South Australia and the Northern Territory during the years 1990–91 to 1992–93 are shown in the following table.

Postal Articles Handled, South Australia and Northern Territory ('000)

Year	*Standard letters*	*Other letters and parcels*	*Security post*	*All articles*
Posted for delivery:				
Within Australia;				
1990–91	255,939	34,406	210	290,555
1991–92	257,454	34,499	204	292,157
1992–93	250,421	39,455	259	290,135
Beyond Australia;				
1990–91	9,960	1,133	39	11,132
1991–92 *(a)*	7,843	717	32	8,592
1992–93	8,918	777	41	9,736
Received from beyond Australia:				
1990–91	4,457	948	16	5,421
1991–92 *(a)*	3,927	951	14	4,892
1992–93	3,667	915	18	4,600

(a) The variation on previous years data is due to Australia Post despatching more 'to overseas' mail from its international mail centre in Victoria.

Telecommunications

A new entity was established on 1 February 1992 through the merger of the Australian Telecommunications Corporation (Telecom Australia) and the Overseas Telecommunications Corporation Limited (OTC). Known as the Telstra Corporation Limited which trades as Telecom Australia for domestic services and Telstra for international, it provides a comprehensive array of products and services for clients ranging from residential customers to government and major corporations operating in Australia and overseas. Telstra is a publicly owned government business enterprise which pays a profit dividend to the Commonwealth Government. It was exposed to full competition from a private enterprise network carrier, Optus Communications, with the introduction of their mobile services in July 1992.

During the 1991–92 financial year there was the continued extension of digital technology and Telecom's optical fibre pathways. Together these form the basis for delivery of the new generation of Broadband and Integrated Services Digital Network (ISDN) services into the office and home.

With more than 1,000,000 kilometres of optical fibre in service stretching from Port Hedland in Western Australia to Cairns in Queensland, Telecom now operates one of the largest such networks in the world. In South Australia and the Northern Territory 11,500 kilometres of optical fibre have been installed.

The South Australian and Northern Territory network continues to grow, with 66,300 new lines installed in 1992–93 to cater for growth and the replacement of older equipment. Telecom will invest approximately $131 million in South Australia and the Northern Territory in 1993–94 for extensions and upgrades of the network, which provides fully automatic local and trunk service to 871,800 customer lines.

The provision of an automatic telephone service on an equitable and affordable basis to remote areas of Australia has seen the completion in 1992 of the Rural and Remote Areas Program (RRAP). Under this program, 44,000 services were provided at a cost of $530 million.

Radio and television

There are twenty–one medium frequency amplitude modulated (AM) services operating in South Australia. Of these, seven are in Adelaide (three Australian Broadcasting Corporation (ABC), two commercial and two public stations). Six commercial and eight ABC stations service country areas.

Of forty–six VHF frequency modulation (FM) services in South Australia, eleven are based in Adelaide (two ABC, five commercial and four public stations). In the country areas, there are seven public VHF–FM stations and the remainder carry one of three ABC radio network programs – Radio National, Regional Radio or Fine Music (ABC–FM).

A new category of FM Broadcasting introduced in 1992 is Tourist Information Services (Open Narrowcast). These services are low power to provide localised coverage only and operates in the sub–band of 87.5MHz to 88.0MHz. Services are operating currently at Glenelg, Lyndoch, Hahndorf and Bordertown (all on 88.0MHz), but many more are planned across the State for 1992–93.

The first television station, NWS–9, commenced operation in September 1959. The television services currently serving Adelaide are ABS–2 (ABC), SAS–7, NWS–9 and ADS–10 (commercial), as well as the Special Broadcasting Service (SBS–28). The Adelaide services are extended to adjacent areas by ten translators and twenty–four community owned self–help translators.

There are four regional commercial television networks (available through thirty–eight outlets) across regional South Australia. The Commonwealth provides twenty–five transmitting facilities which, coupled with twenty–two self–help facilities, carry the ABC television service to regional South Australia.

Further references

Additional information may be found in the following ABS publications:

9206.0 *Shipping and Air Cargo Commodity Statistics, Australia*
9208.0 *Survey of Motor Vehicle Use, Australia*
9252.0 *Information Paper: Overseas Shipping and Air Cargo: an Overview, Australia*
9303.0 *Motor Vehicle Registrations, Australia*
9304.0 *Motor Vehicle Registrations, Australia*
9309.0 *Motor Vehicle Census, Australia*
9401.0 *Road Traffic Accidents Involving Fatalities, Australia*
9405.0 *Road Traffic Accidents Involving Casualties (Admissions to Hospitals), Australia*

Chapter 15

PUBLIC FINANCE

15.1 FRAMEWORK OF PUBLIC FINANCE

Structure

The collection of public revenue and the expenditure of public money in South Australia are the responsibility of three groups of authorities: (i) Commonwealth Government; (ii) South Australian Government and State public corporations which together make up State authorities; and (iii) local government.

Reference is made to the revenue and expenditure of the Commonwealth Government only to the extent that it affects the finances of the State Government. The transactions which are included represent only a small proportion of total expenditure by the Commonwealth Government within South Australia.

The power to raise revenue from taxation is vested in the various governments and authorities by Acts of Parliament. Other revenue comes from the proceeds of the sale of goods and services to the public and to other governments and authorities. A major proportion of the revenue of the State Government, and a smaller proportion of the revenue of local government authorities and some public corporations is derived from grants from other levels of government. A further source of funds is the loan market; government securities are issued for loan raisings in Australia and overseas.

Financial management

State Government

The financial administration legislation under which the State's finances are managed is the *Public Finance and Audit Act 1987*. The Act provides the framework within which the Government exercises control over the money which Parliament has appropriated.

The Act has established several types of accounts which, when taken together, comprise the Public Accounts. The most important of these accounts are:

- Consolidated Account
- Special Deposit Accounts
- Deposit Accounts

Consolidated Account

The Consolidated Account is the Treasurer's main operating account and until recently, the account in which all receipts and payments referred to in the Budget were recorded.

Since July 1991, most departmental financial operations are conducted through Special Deposit Accounts rather than the Consolidated Account. Parliament now appropriates a single amount ('net drawdown') to each Department which is credited to a Special Deposit Account established for the purpose of recording the financial transactions of the Department.

The Consolidated Account is credited with State taxes, fines, regulatory fees, royalties, borrowings, and Commonwealth general purpose grants which form the basis for appropriation to departments.

Deposit Accounts

These are principally moneys lodged with the Treasurer by public authorities and other bodies on current account; funds held for specific purposes pursuant to legislation, not necessarily expendable in any one year; contractors' and statutory deposits and unclaimed moneys. The terms and conditions on which deposits are accepted are determined by the Treasurer.

Special Deposit Accounts

Special Deposit Accounts are established to facilitate accounting for and control of recurrent and capital financial operations of departments and specific administrative arrangements *e.g.* the State Bank of South Australia Asset Valuation Reserve Account. Accounts are credited with Parliamentary appropriations, departmental fees and charges, receipt from the sale of assets, Commonwealth specific purpose grants and, at the Treasurer's discretion, interest on the account balance. Funds are applied to meet recurrent and capital payments.

The use of these accounts for departmental operations has become more widespread in recent years. The majority of departments operated through these accounts in 1992–93 instead of the Consolidated Account.

Public corporations

A public corporation is defined as a body (other than a local government authority) created by or under legislation to carry out an activity or activities on behalf of a government, or a body in which a government has a controlling interest.

Most public corporations enjoy considerable freedom in the conduct of their financial affairs. Section 7 of the Public Finance and Audit Act permits money received by an instrumentality of the Crown, that would otherwise be paid into the Consolidated Account, to be applied by the instrumentality without Parliamentary appropriation for the purpose of carrying out its functions.

There are numerous examples of bodies which operate in this way but some of the more prominent are the South Australian Government Financing Authority (SAFA), the State Transport Authority (STA), the Electricity Trust and the Pipelines Authority.

Local government authorities

The relevant legislation under which local government finances are managed is the Local Government Act and the 'Local Government Accounting Regulations 1993'. The Regulations provide for uniformity in local government accounting and the adoption, as far as possible, of accepted accounting principles.

15.2 INTER–GOVERNMENTAL FINANCIAL RELATIONS

The Commonwealth Government's financial relations with the State and local government sectors comprise three broad types:

(a) the provision of financial assistance in the form of grants or advances;

(b) the Commonwealth undertaking borrowings of amounts determined by the Australian Loan Council on behalf of the States; and

(c) the determination by Loan Council of the level of borrowings that can be undertaken each financial year by State semi–government and local authorities, government–owned companies and trusts.

Financial assistance to State Government

The Commonwealth has made payments to the States since Federation. Before the 1939–45 War these payments had a relatively small impact on the overall finances of the States; they were confined in the main to special grants designed to assist the financially weaker States and to certain specific purpose grants, including assistance for roads and for debt charges.

During and after the 1939–45 War however, there was a marked increase in the amount and scope of assistance to the States. This reflected not only the introduction and continuation of uniform income tax, but also an increase in the range and variety of the activities of both Commonwealth and State Governments and greater participation by the Commonwealth Government in matters which were previously considered to be the sole responsibility of the States.

Commonwealth financial assistance to the States is provided in three main forms namely:

(1) *General revenue assistance* – these are untied grants to assist in meeting recurrent State outlays. This is the largest inter–government transfer, accounting for 46 per cent of Commonwealth payments to the six States and Northern Territory in 1992–93.

(2) *General purpose capital payments* – these are untied payments to assist with State outlays for capital purposes. They comprise the proceeds of borrowings by the Commonwealth on behalf of the States along with grants from the Commonwealth provided in lieu of such borrowings. In addition, the States are permitted to nominate amounts from within the borrowing component of the program for public housing purposes. These latter amounts are provided as loans from the Commonwealth on concessional terms and conditions.

(3) *Specific purpose payments* – these are payments to the States to meet expenditure, the purpose of which is designated by the Commonwealth and/or as a condition of States agreeing to undertake particular actions. In 1992–93, approximately 74 per cent of the payments were for recurrent purposes and virtually all were provided as grants. Some of these payments are passed on by States to local government authorities.

Commonwealth Payments and Loan Council Borrowings
($ million)

Particulars	*1990–91*	*1991–92*	*1992–93*
General purpose funds:			
Revenue	1,434.8	1,482.0	1,529.9
Capital grants	39.0	39.0	57.7
Total general purpose	*1,473.8*	*1,520.9*	*1,587.6*
Specific purpose:			
Recurrent	910.0	1,055.5	1,263.0
Capital	266.8	240.3	401.4
Total specific purpose	*1,176.8*	*1,295.8*	*1,664.4*
Total Commonwealth payments	**2,650.6**	**2,816.8**	**3,252.0**

Financial assistance to local government

The Commonwealth's financial relations with local government consist of payments from the Commonwealth Budget made directly or through State Governments, and Loan Council arrangements on local government borrowings.

General purpose assistance

General purpose assistance comprises untied grants which are the local government equivalent of general purpose assistance to the State Government Sector. The grants are paid initially to the States who are required to pass on the full amounts to local government authorities. General purpose financial assistance has been paid to local government authorities since 1974–75. Arrangements since 1986–87 have been embodied in the *Local Government (Financial Assistance) Act 1986* (Cwlth).

Direct payments

There are a number of programs under which local government authorities are among the bodies eligible for Commonwealth assistance. The grants are required to be spent on specific purposes designated by the Commonwealth *e.g.* child care. Some of the funds provided to the States for specific purposes are passed on to local government. The amounts passed on are generally at the discretion of State governments, although in certain instances (such as road funding) the amounts passed on are subject to the approval of the Commonwealth.

Commonwealth Payments to Local Government
($ million)

Particulars	*1990–91*	*1991–92*	*1992–93*
General purpose assistance *(a)*	60.0	78.8	80.7
Direct payments:			
Current	4.6	4.0	4.2
Capital	0.8	0.2	*(b)*30.7
Total direct	*5.4*	*4.2*	*34.9*
Specific purpose assistance on–passed by the State *(c)*	19.0	3.9	8.2
Total Commonwealth payments	**84.4**	**86.9**	**123.8**

(a) General purpose assistance is paid in the first instance to the State Government. *(b)* Includes $30.7 million under Local Capital Works Program. *(c)* From 1991–92 specific purpose assistance for roads included under general purpose assistance.

15.3 STATE AUTHORITY FINANCE

The financial statistics for the public sector essentially are a reclassification of information published in accounting statements of the public authorities supplemented by additional dissections of the reported transactions.

Transfers between funds and accounts within the accounting systems and transfers between public authorities are eliminated on consolidation.

Public financial enterprises such as banks and insurance companies are excluded from the statistics on the ground that combining their income or outlay on capital transactions with equivalent transactions of other public authorities would provide a less meaningful account of public sector activity.

Classification schemes

The two main transactions classifications used in the compilation of government finance statistics are the economic transactions framework (ETF) and government purpose classification (GPC).

The economic transactions framework categorises outlays, revenue and grants received and financing transactions according to their economic character to facilitate study of the macro–economic effect of government activity on the economy and to provide basic building blocks for grouping transactions to be incorporated into the Australian National Accounts.

The government purpose classification is used to group outlays with similar functions to facilitate study of the broad purposes of public sector spending and assessment of the effectiveness of outlays in meeting government policy objectives. To facilitate international comparisons the GPC classification closely follows the same classification principles as the United Nations 'Classifications of the Functions of Government' (COFOG).

Details of definitions and classifications used in public finance statistics are given in *Classifications Manual for Government Finance Statistics, Australia* (1217.0).

Receipts and financing

Details of receipts and financing transactions of South Australian State authorities have been consolidated from the accounts of the State Government departments and corporations and are classified in the following table to show the major sources of funds. The Personal Income Tax Sharing Entitlement grants are the largest revenue source of State authorities.

State Authorities : Receipts and Financing Transactions
($ million)

Classification	*1989–90*	*1990–91*	*1991–92*
Revenue and grants received:			
Taxes, fees and fines	1,349.3	1,520.6	1,658.7
Net operating surplus of trading enterprises;			
Operating revenue	2,839.8	2,859.3	3,095.8
Operating expenditure	2,279.1	2,311.9	2,571.7
Property income;			
Income from public financial enterprises	39.2	157.6	*(a)*–3.1
Interest received	257.1	217.8	293.5
Other	51.6	88.5	80.1
Other revenue	50.4	63.1	70.3
Grants received;			
From the Commonwealth,			
For current purposes	2,285.1	2,417.1	2,600.7
For capital purposes	284.1	255.6	229.0
From local authorities	0.1	0.2	–
Total revenue and grants received	*4,877.6*	*5,267.9*	*5,453.4*
Financing transactions:			
Advances from the Commonwealth (net)	–129.6	–281.8	–235.3
Net borrowing;			
General government	270.3	787.7	3,842.7
Public trading enterprises	73.9	–72.2	–10.9
Deposits received (net)	–52.9	117.1	–9.4
Decrease in investments	397.1	180.0	–643.7
Decrease in currency and deposits	–126.9	101.6	–623.5
Increase in provisions	230.5	273.9	252.8
Equity capital	2.1	2.9	5.8
Other funds available	30.4	–141.3	164.4
Total financing transactions	*694.9*	*967.7*	*2,742.9*
Total funds available	**5,572.5**	**6,235.6**	**8,196.3**

(a) Includes $36 million paid to SGIC as compensation for the Compulsory Third Party Fund.

State Taxation

Until the introduction of the uniform income tax scheme in 1942–43 with the Commonwealth being the sole levier of income tax, income tax was the major source of taxation receipts in South Australia. The major forms of taxation then left to the State were payroll tax, motor tax, succession and stamp duties, and land tax, but legislative changes in 1980 have subsequently reduced the levels of succession duties, land tax and gift duties. Stamp duty is payable on a wide range of instalment purchase, leasing and other lending transactions.

Commencing in 1977–78, under the new personal income tax sharing arrangements, each State was given the right to impose a surcharge or grant a rebate on personal income tax in its State. Any State surcharges or rebates would be collected or paid by the Commonwealth on behalf of the States. To date no State has imposed a surcharge or granted a rebate under the income tax sharing arrangements.

State Authorities : Taxation
($ million)

Particulars	*1989–90*	*1990–91*	*1991–92*
Employers' payroll taxes	329.3	389.5	393.8
Taxes on property:			
Land taxes	71.9	76.0	75.6
Taxes on immovable property n.e.c.	3.3	3.7	3.6
Financial institutions transactions taxes	49.4	103.8	132.3
Stamp duties	199.1	172.8	175.6
Taxes on provision of goods and services:			
Excises;			
Agricultural production taxes	0.5	0.1	–
Levies on statutory corporations	38.7	39.9	41.5
Taxes on gambling;			
Taxes on government lotteries	66.7	76.5	82.9
Taxes on private lotteries	2.7	2.1	0.7
Casino taxes	15.4	16.5	17.0
Race betting taxes	37.8	38.5	40.2
Taxes on insurance;			
Insurance companies' contributions to fire brigades	35.7	37.7	40.0
Third party insurance taxes	2.4	7.5	12.8
Taxes on insurance n.e.c.	41.2	57.2	68.1
Taxes on use of goods and performance of activities:			
Motor vehicle taxes;			
Vehicle registration fees and taxes	100.0	110.1	118.8
Stamp duty on vehicle registration	65.9	61.4	61.3
Drivers licences	11.8	11.4	25.1
Road transport and maintenance taxes	0.3	0.4	0.4
Franchise taxes;			
Gas franchise taxes	6.7	7.8	7.7
Petroleum products franchise taxes	77.9	70.1	86.3
Tobacco franchise taxes	55.2	85.3	92.2
Liquor franchise taxes	40.6	42.6	43.9
Other taxes on use of goods etc.	2.8	2.0	4.2
Fees and fines:			
Fees from regulatory services	73.3	82.7	101.2
Fines	20.7	24.9	33.5
Total taxation	*1,349.3*	*1,520.6*	*1,658.7*

Outlays

Outlays of State authorities are shown in the following table grouped according to whether they are current or capital. Fundamental distinction between the two rests on whether the transactions are 'used up' over a period of one year or represent assets which generate a future stream of assets.

Grants and other transfers between State authorities have been eliminated on consolidation in the following table.

State Authorities : Outlay
($ million)

Classification	*1989–90*	*1990–91*	*1991–92*
Current outlay:			
Final consumption expenditure;			
Gross current expenditure	3,623.4	3,956.4	4,261.6
Offsetting receipts from sales	680.9	725.2	818.9
Requited current transfer payments;			
Interest payments,			
To Commonwealth on advances	253.5	238.5	198.5
Other	651.8	691.5	962.8
Land rent, royalties, dividends paid	3.5	3.7	4.6

State Authorities : Outlay *(continued)*
($ million)

Classification	*1989–90*	*1990–91*	*1991–92*
Unrequited current transfer payments;			
Subsidies paid	230.2	240.2	242.1
Personal benefit payments	79.1	104.0	96.6
Current grants,			
To non–profit institutions	249.6	273.8	297.6
To local authorities	70.8	71.1	72.8
Other current transfers	21.0	23.5	8.6
Total current outlay	*4,502.0*	*4,877.4*	*5,326.3*
Capital outlay:			
Gross fixed capital expenditure	872.7	868.2	766.9
Increase in stocks	22.3	–37.9	31.5
Expenditure on land and intangible assets	15.7	10.4	–3.5
Capital transfer payments;			
Capital grants,			
To private sector and public financial enterprises	16.4	10.3	9.9
To local authorities	36.5	26.9	28.7
Advances paid (net);			
To public financial enterprises	23.9	499.9	*(a)*2,066.5
To private sector	83.3	–15.0	–29.3
Other	–0.5	–4.4	–0.8
Total capital outlay	*1,070.3*	*1,358.4*	*2,869.9*
Total outlay	**5,572.3**	**6,235.8**	**8,196.2**

(a) Includes $1,800 million paid to State Bank as part of the State Bank rescue package and $267 million to SGIC re 333 Collins Street, Melbourne put option.

The following table shows outlay of State authorities classified by purpose of public sector spending. Education accounted for 20.2 per cent of total outlay in 1991–92 and health for 13.1 per cent.

State Authorities : Outlay by Purpose
($ million)

Classification	*1989–90*	*1990–91*	*1991–92*
General public services	209.5	722.5	*(a)*2,301.1
Public order and safety	383.5	421.7	434.1
Education	1,377.8	1,550.1	1,654.7
Health	997.4	1,048.9	1,075.8
Social security and welfare	206.9	223.5	243.4
Housing and community amenities	342.7	318.1	159.7
Recreation and culture	181.6	188.3	184.6
Fuel and energy	245.7	150.0	220.6
Agriculture, forestry, fishing and hunting	121.9	39.1	146.1
Mining, manufacturing, construction	51.8	45.4	35.9
Transport and communications	398.3	419.3	439.8
Other economic affairs	96.2	79.9	72.5
Other purposes	959.0	1,028.9	1,227.9
Total outlay	*5,572.3*	*6,235.8*	*8,196.2*

(a) Includes $1,800 million paid to State Bank as part of the State Bank rescue package and $267 million to SGIC re 333 Collins Street, Melbourne put option.

Further references

Additional information may be found in the following ABS publications:

5503.4 *State and Local Authorities Finance, South Australia*
5512.0 *Government Finance Statistics, Australia*

15.4 LOCAL GOVERNMENT FINANCE

For the purpose of determining the scope of local government finance statistics, a local government authority is defined as:

(a) an authority set up under a local government Act to carry out the functions of local government in a defined area (known as a municipality or district council) the members of which are elected by persons enrolled as electors for the House of Assembly in respect of an address within the area, or who are ratepayers in respect of rateable property within the area. A body corporate is enrolled under the name of a nominated agent; or

(b) an authority created or acquired by a local government authority (as defined above) or by two or more local government authorities (in South Australia an authority established under Part XIII or Section 199 of the *Local Government Act 1934*).

Revenue transactions

Rates and government grants are the principal sources of revenue of local government authorities and represented 51.7 per cent and 15.5 per cent respectively of total revenue in 1991–92.

Details of revenue from ordinary services, as distinct from business undertakings, and loan receipts during the three years to 1990–91 are as follows.

Local Government Authorities : Ordinary Services
Revenue and Loan Receipts
($ million)

Particulars	*1989–90*	*1990–91*	*1991–92*
Rates (including penalties)	307.9	338.0	364.6
Licences, fees and fines	16.4	15.3	16.4
Charges for services	69.5	78.0	88.0
Contributions and donations	4.9	6.3	5.0
Reimbursements received	15.1	16.2	13.2
Interest received	28.2	23.7	17.5
Sale of land and other fixed assets	27.1	26.2	31.3
Other	3.8	2.9	2.5
Government grants:			
General purpose	58.2	59.7	60.6
Specific purpose	42.3	47.7	48.4
Total revenue	*573.4*	*613.9*	*647.5*
Loan receipts	51.2	54.9	56.6
Total revenue and loan receipts	**624.6**	**668.8**	**704.0**

Loan receipts

Loans raised by local government authorities during 1991–92 totalled $56.6 million for ordinary services. Most of these loans were raised with the Local Government Finance Authority.

Outlay transactions

A number of differences occur between the presentation of local government finance statistics and those of other levels of government. Public sector finance statistics generally are prepared on a net basis in which selected receipts are offset against relevant outlays, and vice versa, but in local government finance statistics transactions are shown as gross values and subsequently adjusted to the net basis when consolidated into the State and local government sector accounts. For this reason the tables which follow show 'current outlay on goods, services and land' rather than the net concept of final consumption expenditure. A summary of ordinary services outlay of local government authorities during the three years to 1991–92 is shown in the next table.

Local Government Authorities : Ordinary Services, Outlay
($ million)

Particulars	*1989–90*	*1990–91*	*1991–92*
Outlay on goods, services and land:			
Capital;			
New fixed assets,			
Roadworks construction	59.9	63.7	57.6
Other	109.2	107.8	107.6
Land and other fixed assets	11.0	16.9	15.1
Current;			
General public services	75.6	81.6	87.6
Roadworks, maintenance	63.6	67.6	74.6
Other	219.5	239.8	257.4
Total outlay on goods etc.	*538.7*	*577.4*	*599.8*
Debt charges:			
Interest	36.4	40.6	41.5
Debt redemption	28.3	34.4	34.8
Levies paid to government	6.5	7.0	7.6
Donations paid	3.3	3.1	3.7
Other	0.6	1.5	1.8
Total outlay	**613.9**	**664.0**	**689.2**

Electricity undertakings

Three councils in the northern area of the State, Roxby Downs (M), Peterborough (M) and Hawker (DC) owned and operated electricity supply schemes during 1991–92, Coober Pedy (DC) owns electricity supply equipment which the Cowell Electric Supply Co. Ltd operates.

Current outlay consisting of working expenses and interest paid on loans raised for the schemes totalled $6.3 million, gross capital formation and debt redemption principal repayments totalled an additional $1.5 million.

Electricity undertakings are classified as trading activities in local government finance statistics and details of the transactions are not included in the ordinary services of local government authorities.

Further references

Additional information may be found in the following ABS publications:

5503.4 *State and Local Authorities Finance, South Australia*
5502.4 *Local Government Finance, South Australia*
5512.0 *Government Finance Statistics, Australia*

15.5 AUSTRALIAN NATIONAL ACCOUNTS

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially of those that relate to the production and use of goods and services, and to transfers of income or capital between sectors of the economy. Major interest is focused on the domestic production account and within that, gross domestic product (GDP).

Estimates of State Accounts have been prepared in recent years. These estimates are a dissection of the Australian National Accounts and in some cases have been built up using the same data sources as those used in the National Accounts; in others the dissections are based on a variety of sources ranging from those directly related, for example the economic censuses, to general indicators of activity such as population changes and household income.

A full presentation of Australian National Accounts is contained in the bulletins *Australian National Accounts, National Income, Expenditure and Product* (5204.0) (annual) and *Australian National Accounts: National Income, Expenditure and Product* (5206.0) (quarterly) and the other publications in this series.

State accounts

While national estimates are based on the concepts and conventions embodied in the United Nations *A System of National Accounts* (SNA) 1968, no such standard is available for sub–national (Regional/State) accounts. The national concepts generally are applicable to State Accounts but a number of conceptual and measurement issues which are important to State Accounts either do not apply or are insignificant at the national level. Most of the problems arise in the context of State gross product for the transport and communication industries where a number of conceptual views are possible. A detailed discussion of the issues surrounding the compilation of State Accounts together with a description of the available data sources and the estimation methodology are contained in the *State Accounts, Australia: Issues and Experimental Estimates* (ABS Occasional Paper 1984/4).

The fundamental concepts of gross domestic product are:

Gross Domestic Product at Market Prices (usually referred to as Gross Domestic Product) is the total market value of goods and services produced, after deducting the cost of goods and services used up in the production process but before deducting allowances for the consumption of fixed capital (or depreciation allowances). In concept it is the sum, for all producers, of the value of their sales (including any indirect taxes levied thereon), plus increases in their stocks, less the purchase of intermediate goods and services from other producers. For those producers, like general government, who do not generally sell their output, it includes output valued at cost instead of sales.

Gross Domestic Product at Factor Cost is that part of gross domestic product accounted for by gross payments to factors of production. It is equivalent to gross domestic product less indirect taxes plus subsidies.

Methodology

There are three distinct approaches which can be taken to measure gross domestic product namely:

(1) the income approach;

(2) the expenditure approach; and

(3) the production approach.

State gross product shown in the following table is derived using the income approach as it was not possible to prepare an expenditure–based estimate using available data sources. For example, for some States interstate trade statistics are seriously incomplete for goods and virtually non–existent for services and data for Commonwealth government final expenditure by State is not available.

State Gross Product
($ million)

Particulars	*1989–90*	*1990–91*	*1991–92*
Wages, salaries and supplements	14,260	15,139	15,159
Gross operating surplus	11,035	10,615	11,146
State Gross Product at Factor Costs	*25,295*	*25,754*	*26,305*
Indirect taxes less subsidies	3,064	3,227	3,238
State Gross Product at Market Prices	*28,359*	*28,981*	*29,543*
Total per head of mean population ($)	*19,908*	*20,138*	*20,316*
Total as a percentage of national gross domestic product (per cent)	*7.7*	*7.6*	*7.6*

Further references

Additional information may be found in the following ABS publications:

5204.0 *Australian National Accounts: National Income, Expenditure and Product* (annual)

5206.0 *Australian National Accounts: National Income, Expenditure and Product* (quarterly)

5211.0 *Australian National Accounts, Gross Product by Industry*

5220.0 *Australian National Accounts, State Accounts*

Chapter 16

PRIVATE FINANCE

16.1 BANKING AND CURRENCY

Banking

The banking system in Australia in 1992 comprised a central bank (the Reserve Bank of Australia), thirty–four banks (one owned by the Commonwealth Government, three by State Governments, and thirty privately owned), the Commonwealth Development Bank and the Australian Resources Development Bank (specialist banks, owned respectively by the Commonwealth Government and a consortium of the four major banks). Thirteen banks, plus the Reserve Bank, have branches in South Australia.

The conduct of banking business in Australia is governed by the *Banking Act 1959* (Cwlth). Amendments to the Banking Act late in 1989 gave the Reserve Bank explicit powers for prudential supervision of banks. They also provided the Reserve Bank with greater power to seek information from banks and to investigate the affairs of banks.

Other important amendments to the Banking Act removed the distinctions between trading and savings banks, formally replaced the Statutory Reserve Deposit requirement on trading banks with a new non–callable deposit requirement applicable to all banks, placed greater emphasis on prudential supervision of banks and provided a formal statutory foundation for this supervision.

The issue of foreign bank entry was examined extensively by the Commonwealth Government and the Reserve Bank during 1992, as well as the Parliamentary Banking Inquiry. On 26 February 1992 the Government announced that new foreign banks would be permitted to apply for a banking authority in Australia and that foreign banks, including those presently in Australia, would be allowed to operate with a branch structure, provided they were able to meet the Reserve Banks prudential requirements.

Additional historical information on banking is contained in the 1986 edition of the *South Australian Year Book* and the *Year Book Australia*.

Reserve Bank of Australia

The Reserve Bank of Australia functions as a central bank, controls the Australian note issue and acts as banker to the Commonwealth and some of the States. As part of its responsibility under the Banking Act to protect the interests of bank depositors, the Reserve Bank conducts prudential supervision of banks. The ultimate responsibility for sound management of a bank resides with that bank's board and management, but in consultation with banks the Reserve Bank maintains a framework of prudential standards within which a bank must operate. The standards cover a bank's capital, liquidity management, large credit exposures and various other aspects of its operations.

Commonwealth Banking Corporation

The Commonwealth Banking Corporation was established under the *Commonwealth Banks Act 1959* (Cwlth). It is the controlling body for the Commonwealth Bank and the Commonwealth Development Bank.

Commonwealth Development Bank

The Commonwealth Development Bank is a supplementary source of finance for primary production and for the establishment or development of small business undertakings. It does not compete with conventional lenders, but provides financial help when finance is not otherwise available on suitable terms.

Australian Resources Development Bank Limited

This corporation was formed by the major trading banks with the support of the Reserve Bank and was given bank status by an amendment to the Banking Act in 1967. It provides finance for the development of Australia's natural resources, mainly in the form of refinanced bank loans, but also by direct lending and equity participation.

Primary Industry Bank of Australia Limited

The Primary Industry Bank of Australia Limited was established under the authority of the *Primary Industry Bank Act 1977* (Cwlth). An unrestricted national banking authority was granted to the bank on 30 June 1987 and the Primary Industry Bank Act was repealed. The bank has since been able to expand its original objective of refinancing loans to primary producers to include new rural loans as well as commercial and property loans. The Adelaide Branch opened in November 1987 giving the bank a presence in all mainland capital cities in Australia.

Banks originating in South Australia

The Savings Bank of South Australia commenced operations on 11 March 1848 following the enactment of an ordinance in 1847. It merged with the State Bank of South Australia on 1 July 1984. With a subscribed capital of $500,000 in 50,000 shares of $10 each, the first trading bank promoted in South Australia was The Bank of Adelaide which opened for business on 11 December 1865. The Australia and New Zealand Banking Group Ltd took over the operations of The Bank of Adelaide from 1 October 1980.

Pursuant to the State Advances Act of 1895 the State Bank of South Australia commenced business in 1896. The original Act directed that advances were to be made on first mortgage to farmers, other primary producers and local government authorities.

The *State Bank Act 1925* repealed the State Advances Act, and enlarged the scope of the activities of the Bank by making provision for loans on overdraft and all business of general banking.

Branches and agencies

Of the thirty–four trading banks which operate in Australia, the thirteen banks listed below conduct business in South Australia.

Government banks

Commonwealth Bank of Australia State Bank of South Australia

Private banks

Australia and New Zealand Banking Group
National Australia Bank Limited
Bank of New Zealand
Bank of Singapore (Australia)
Challenge Bank
Chase Bank Manhattan
Citibank
NatWest Australia Bank Limited
Primary Industry Bank of Australia
Standard Chartered Bank Australia
Westpac Banking Corporation

Banks : Branches and Agencies at 30 June 1992

Banks	*Branches*	*Agencies*
Commonwealth Bank of Australia	94	423
State Bank of South Australia	175	136
Australia and New Zealand Banking Group	133	60
Westpac Banking Corporation	92	4
National Australia Bank	84	10
Other banks	10	–
Total – Metropolitan area	*365*	*361*
Country	*223*	*272*
Total State	**588**	**633**

The State Bank of South Australia has four treasury units, based in Adelaide, Sydney, Auckland and London. Its New Zealand activities were significantly downsized through the sale of United Bank Ltd, the reduction of corporate and commercial assets and a programme to divest remaining non–core businesses. The Auckland branch will continue to service a select customer base of major companies trading in Australia and New Zealand.

Banks : Balance of Deposits and Advances to Customers Accounts[(a)]
($ million)

	Depositors balances			
Year	*Bearing interest*	*Not bearing interest*	*Total*	*Loans, advances and bills discounted*
1988	7,629	700	8,329	n.a.
1989	8,600	722	9,322	n.a.
1990	11,274	800	12,074	13,771
1991	12,060	649	12,709	15,853
1992	12,163	887	13,050	16,054

(a) Average of weekly figures for month of June.

Interest rates

Bank interest rates are not formally determined under the Banking Act. Maximum rates are fixed after discussions between the Reserve Bank and the banks, and with the approval of the Treasurer. State Government banks, although not bound by rulings of the Reserve Bank, tend to conform to them.

School banking

Special banking facilities for school children were introduced into South Australia with the inauguration of the School Banking Department of the Savings Bank of South Australia on 28 April 1908. The State Bank of South Australia assumed this role after merger with the Savings Bank of South Australia on 1 July 1984. The Commonwealth Bank of Australia and some private banks provide similar services at some schools.

Currency

The Commonwealth Treasurer is empowered by legislation to arrange for the making and issuing of coins of specified denominations. Australia's coin requirements are met by the Royal Australian Mint in Canberra.

Australian notes are printed by Note Printing Australia, a division of the Reserve Bank in Melbourne. From 1 July 1990 the operations of Note Printing Australia have been carried out as a separate business enterprise. Notes in circulation are of the denominations $5, $10, $20, $50 and $100. A plastic $10 commemorative note was released in January 1988 to coincide with the Bicentennial. In May 1990 the Bank announced that a new series of currency notes would be issued, commencing with the $5 note which was released on 7 July 1992. The new series is printed on plastic and incorporates optically variable devices like that pioneered on the commemorative $10 note.

Coins in circulation are 1 cent and 2 cent (bronze), 5, 10, 20 and 50 cents (cupro–nickel), $1 and $2. The $1 and $2 notes were replaced by coins in 1984 and 1988 respectively. Reissue of 1 and 2 cent coins ceased from 1 February 1992 and, over the following five months, $10 million or 2,500 tonnes of these coins were returned by banks to the Reserve Bank.

16.2 OTHER PRIVATE FINANCE

Australian Stock Exchange Limited

The Stock Exchange of Adelaide was formed in 1887 by the amalgamation of the Adelaide Stock Exchange and the Stock Exchange of South Australia. One hundred years later the six State capital city exchanges were amalgamated into one national Exchange, the Australian Stock Exchange Limited (ASX), which commenced business on 1 April 1987. The ASX has transformed the share market industry through the development of computer trading. The hubbub of the trading floor disappeared in Adelaide on 31 August 1990. On that date the trading floor in Adelaide closed and all stocks were incorporated into the computer trading system.

New fixed capital expenditure

Estimates of capital expenditure are obtained from a sample of private enterprises other than in the agriculture and community services industries. State dissections are achieved by allocating expenditure to the State where the assets have or will be used.

New fixed capital expenditure refers to expenditure on new fixed tangible assets including major improvements, alterations and additions.

Further details are available in the quarterly bulletin *State Estimates of Private New Capital Expenditure* (5646.0).

Private New Fixed Capital Expenditure (S million)

Period	Selected industry: Manufacturing	Selected industry: Finance, property and business services	Selected industry: Other selected industries	Selected industry: Total	Type of asset: New building and structures (a)	Type of asset: Other new capital equipment
1989–90 ..	764	472	547	1,783	634	1,149
1990–91 ..	745	412	673	1,830	628	1,203
1991–92 ..	759	143	657	1,559	383	1,176

(a) Includes mine development.

Building societies

The operations of building societies in South Australia are regulated by the *Building Societies Act 1975* which is administered by the State Business and Corporate Affairs Office, with whom they must be registered. There are two categories of building society in South Australia – permanent and terminating (Starr–Bowkett) societies. Four Starr–Bowkett societies operate in South Australia and are expected to terminate by 1995.

A permanent building society is an organisation that has not by its rules any fixed date or certain event or result when it is to terminate, is authorised to accept money on deposit, and operates on a cooperative basis by borrowing predominantly from its members and providing finance to its members principally in the form of housing loans. More detailed statistics are available in the bulletin *Annual Statistics on Financial Institutions* (5661.0).

Permanent Building Societies : Liabilities and Assets (S'000)

Liabilities	*1990–91*	*1991–92*	*Assets*	*1990–91*	*1991–92*
Share capital and reserves:			Financial assets:		
Share capital	1,316,063	1,432,551	Placements and deposits ...	138,086	70,537
Reserves	83,508	49,075	Bills, bonds and other securities	252,542	336,935
Borrowings	450,326	384,660	Loan outstandings	1,384,381	1,421,255
Other liabilities	51,363	23,334	Cash, accounts receivable and other financial assets	61,164	7,749
			Other assets	65,087	53,144
Total liabilities	*1,901,260*	*1,889,620*	*Total assets*	*1,901,260*	*1,889,620*

Permanent Building Societies : Income and Expenditure (S'000)

Expenditure	*1990–91*	*1991–92*	*Income*	*1990–91*	*1991–92*
Interest on:			Income and interest from:		
Shares	127,471	69,844	Loans	212,730	143,187
Deposits	43,269	53,380	Deposits	8,007	3,104
Loans	25,106	1,879			
Wages and salaries	26,106	24,795	Income from holdings of securities	42,263	33,112
Administrative expenses..	24,809	16,003			
Other expenses	27,65	19,041	Other income	15,002	16,911
Total expenditure	*274,416*	*184,942*	*Total income*	*278,002*	*196,314*

Credit Unions

Credit Unions are registered under the *Credit Unions Act 1989* which is administered by the State Business and Corporate Affairs Office. Credit Unions operate on a cooperative basis by predominantly borrowing from and providing finance to their own members. The following table shows details of Credit Unions' assets and liabilities. The figures are aggregates of returns submitted by Credit Unions for their relevant accounting periods closing on various dates during the financial years shown.

Credit Unions

Particulars	*1989–90*	*1990–91*	*1991–92*
	NUMBER		
Societies	17	16	13
Members at end of period	231,539	245,111	256,853
	$'000		
Income:			
Interest on loans to members	121,015	123,070	118,096
Other	24,230	24,875	29,068
Total	*145,245*	*147,945*	*147,164*
Expenditure:			
Interest on deposits	87,709	82,330	70,800
Other	52,120	57,354	62,295
Total	*139,829*	*139,684*	*133,095*
Assets:			
Financial;			
Loan outstandings	647,931	703,528	815,570
Cash on hand	3,964	4,159	4,852
Placements and deposits	94,917	116,454	146,776
Securities	10,570	9,875	5,652
Other financial	16,395	14,483	16,315
Other	26,295	26,280	28,236
Total	*800,074*	*874,778*	*1,017,401*
Liabilities:			
Share capital and reserves;			
Paid–up share capital	1,741	1,464	1,500
Reserves	36,118	45,157	57,764
Borrowings;			
Deposits	743,500	813,763	939,335
Other	11,740	5,957	6,683
Other	6,974	8,437	12,119
Total	*800,074*	*874,778*	*1,017,401*

Finance commitments

Details of personal, commercial and lease finance are provided by banks, insurance companies, finance companies, superannuation funds and other financial corporations registered under the *Financial Corporations Act 1974* (Cwlth). Details of personal and lease finance are also provided by permanent building societies and credit unions.

Finance companies are incorporated companies mainly engaged in providing to the general public, personal loans, wholesale finance, factoring, other consumer and commercial loans, financial leasing of business plant and equipment and bills of exchange. A company is mainly engaged in providing these credit facilities if 50 per cent or more of its assets consist of balances outstanding with respect to these types of financing, or if 50 per cent or more of its income is derived from such types of financing. Particulars of housing finance for owner occupation are not included in personal, commercial and lease finance; refer Part 9.3 Housing Finance.

Personal finance

Personal loans comprise all loans to persons and are used predominantly for the purchase of consumer durables; loans for the purchase of housing are excluded. The following table shows finance commitments made by significant lenders to individuals for their private use. Credit Unions accounted for $261 million in total personal finance commitments during 1991–92, nearly 82 per cent of the 'other lenders' category.

Personal Finance Commitments
($ million)

	1990–91			*1991–92*		
Purpose of commitment	*Banks*	*Finance companies*	*Other lenders*	*Banks*	*Finance companies*	*Other lenders*
Commitments under fixed loan facilities:						
Purchase of;						
Motor vehicles	150.3	170.7	104.1	141.0	184.7	107.9
Boats, caravans and trailers	7.3	2.6	3.2	7.0	1.8	4.0
Household and personal goods	15.2	7.4	16.0	16.8	7.3	17.5
Land and dwellings *(a)*	39.4	4.5	27.1	47.2	4.1	13.7
Travel and holidays	8.2	2.4	9.2	8.2	2.4	8.9
Debt consolidation	31.9	6.2	29.6	25.7	4.0	50.8
Refinancing	92.3	12.9	11.9	106.2	13.3	7.5
Other	120.8	9.3	49.3	101.9	7.8	63.5
Commitments under revolving credit facilities:						
New and increased credit limits	463.0	84.2	41.0	377.2	65.8	45.7
Total personal finance commitments	*928.5*	*300.3*	*291.4*	*831.2*	*291.2*	*319.5*

(a) Includes alterations and additions.

Commercial finance

Commercial finance covers finance commitments made by significant lenders to government, private and public enterprises, non–profit organisations and to individuals for investment and business purposes.

Commitments under revolving credit facilities are distinctive in that a borrowing limit is set for a specific period and during that time, any amount may be borrowed up to that limit. Most importantly, any repayments of principal increase the amount of credit available.

Commercial Finance Commitments
($ million)

Purpose of commitment	1990–91 Banks	1990–91 Finance companies	1990–91 Other lenders	1991–92 Banks	1991–92 Finance companies	1991–92 Other lenders
Commitments under fixed loan facilities:						
Erection of buildings	393.2	101.9	22.4	182.0	55.9	11.6
Purchase of real estate	293.8	129.7	3.7	241.1	95.5	1.9
Rural property	38.3	–	–	56.1	1.8	–
Wholesale finance	144.4	47.6	70.4	38.9	5.3	100.0
Purchase of plant and equipment	225.1	118.4	7.1	91.8	167.6	10.5
Refinancing	735.2	1.9	10.1	605.7	8.7	–
Other	675.6	265.6	35.8	1,367.4	106.4	1.1
Commitments under revolving credit facilities:						
New and increased credit limits	2,867.2	69.4	0.1	3,145.0	373.8	–
Total commercial finance commitments	*5,372.8*	*734.6*	*149.6*	*5,727.8*	*815.0*	*125.1*

Lease finance

A finance lease refers to the leasing of tangible assets under an agreement which transfers from the lessor to the lessee substantially all the risks and benefits incident to ownership of the asset without actually transferring legal ownership.

The following table shows lease finance commitments made by significant lenders to private and public enterprises.

Value of Goods Under New Finance Lease Commitments
($ million)

Particulars	1990–91 Banks	1990–91 Finance companies	1990–91 Other lenders	1991–92 Banks	1991–92 Finance companies	1991–92 Other lenders
Motor cars	18.4	120.5	1.0	30.3	110.3	1.0
Other motor vehicles	9.1	33.6	–	3.6	22.5	–
Construction, earthmoving and agricultural equipment	5.9	17.0	–	2.3	6.4	–
Automatic data processing equipment and office machines	9.2	10.9	19.9	4.9	8.9	5.0
Shop and office furniture and equipment	18.0	18.5	–	6.7	7.1	–
Other	26.2	14.9	–	31.1	17.5	–
Total	*86.9*	*215.4*	*20.9*	*78.8*	*172.5*	*6.0*

Merchant banks

The first Australian merchant bank was formed in Melbourne in 1949, but it was not until the late 1960s that merchant banks established themselves in the Australian marketplace as a separately identifiable group.

In 1972 Australian merchant banks, with a common interest in the bill market, formed the Accepting Houses Association of Australia (AHA). This became the Australian Merchant Bankers Association in 1979 when the AHA merged with the Issuing Houses Association of Australia to represent the wider interests of merchant banks.

Merchant banks operate as intermediaries in the professional sector of the capital market and have been responsible for a number of important changes in the Australian financial system. These include the development of the commercial bill market and expansion of the market for promissory notes and certificates of deposit. They have also enabled the expansion of domestic activities through a more widespread access to overseas funds.

Merchant banks are strongly involved in the short–term money market, being largely responsible for the unofficial market overtaking the official market in size during the early 1970s. Their dealings with the Stock Exchange include the underwriting of equity issues, management of investment portfolios and acting as principal in bonds. Merchant banks also provide advice relating to mergers and takeovers, financial re–organisations and planning for expansion.

In 1990 ownership guidelines for dealers were amended to remove the requirement for a spread of ownership and the restriction on foreign ownership. Two new authorisations were announced, bringing the number of authorised dealers to ten.

Merchant banks are predominantly regulated and supervised by the State Corporate Affairs Commission. The *Financial Corporations Act 1974* (Cwlth) requires them to be registered as Money Market Corporations. In addition they are required to be licensed under the Securities Industry Code in each State in order to deal in or advise on securities.

Further references

Additional information may be found in the following ABS publications:

5609.0 *Housing Finance for Owner Occupation, Australia*
5625.0 *Private New Capital Expenditure, Australia, Actual and Expected Expenditure, Preliminary*
5626.0 *Private New Capital Expenditure, Australia, Actual and Expected Expenditure*
5642.0 *Personal Finance, Australia*
5643.0 *Commercial Finance, Australia*
5644.0 *Lease Finance, Australia*
5661.0 *Annual Statistics on Financial Institutions*

Special Article

THE SOUTH AUSTRALIAN WINE INDUSTRY

OVERVIEW OF THE INDUSTRY

The Australian wine industry is a dynamic and export–oriented industry. Australia, while currently producing only 1.5 per cent of the world wine production, is internationally regarded as one of the leaders of the 'New World' wine producing countries which are increasing their world market share at the expense of 'Old World' producers such as France, Italy, Spain and Germany.

The wine industry consists of two major operational areas, wine grape growing and winemaking. These activities are sometimes combined, with winemaking companies growing their own wine grape supplies, and wine grape growers joining to operate cooperative winemaking ventures.

There are currently around 740 individual wineries in Australia, for which the industry bodies have estimated the following details:

- direct employment of approximately 5,000 Australians;
- salaries and wages of around $100 million per annum;
- an estimated $1,000 million capital invested in Australia;
- predominantly Australian–owned private companies;
- an estimated $250 million contribution to Australia's balance of payments per annum; and
- direct Federal and State tax contributions of approximately $400 million per annum.

Retail sales of Australian wine and brandy are worth an estimated $1,400 million per annum, while exports are worth over $290 million and growing. To produce this wine and brandy, between 500,000 and 600,000 tonnes of fresh grapes are crushed between February and May of each year. The grapes used are worth an estimated $250 million and are produced by over 5,000 grape growing establishments.

The last few years have seen significant mergers in the wine industry, so that approximately 80 per cent of wine production is by seven producers. Despite this, there has at the same time been a growth in the number of small producers. In 1982 there were only 301 winemaking establishments, compared with 738 in 1993 (with some cross–ownership). A number of these wineries pay to have their wine made on the premises of other wineries, or contract out their bottling or storage to other wineries. The small wineries are important for the continuing tourist potential of wine regions. In South Australia, the small wineries in the Barossa, Clare and McLaren Vale regions attract visitors to the regions, benefiting other associated businesses such as restaurants, bus companies etc.

The Australian wine industry is dominated by South Australia, with half of the total wine production and two–thirds of the exports being South Australian. The industry has been identified by international consultants Arthur D. Little, as one of the most likely to make a significant contribution to the economic growth of South Australia in the medium to long term.

WINE PRODUCTION

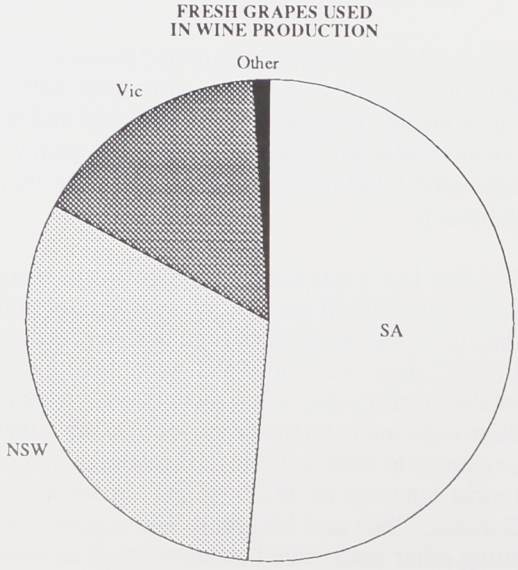
In terms of volumes, South Australia dominates wine and, particularly, brandy production. Although less than 25 per cent of Australia's wineries are located in South Australia, the State generally crushes more than half the grapes processed in Australia, as most of the larger winemakers take a major part of their grape intake in South Australia.

In 1991–92, total wine production in South Australia was 218.1 million litres (nearly 50 per cent of the Australian total), compared with 143.3 million litres in NSW (30 per cent) and 87.5 million litres in Victoria (20 per cent). South Australian production of brandy was 996,000 litres of alcohol (over 90 per cent) and South Australian production of grape spirit was 3,933,000 litres of alcohol (around 60 per cent).

Wine grapes used in production

Over the last six years, an average of 284,000 tonnes per annum of fresh grapes have been processed for winemaking in South Australia, the biggest vintage of 313,000 tonnes in 1989–90 and the smallest of 235,000 tonnes in 1987–88. The quantity crushed can vary considerably due to seasonal availability as well as factors such as existing wine stocks and changes in demand.

The following diagram illustrates the dominance of South Australia in terms of fresh grape processing in Australia.



Source: ABS Cat. No. 8366.0

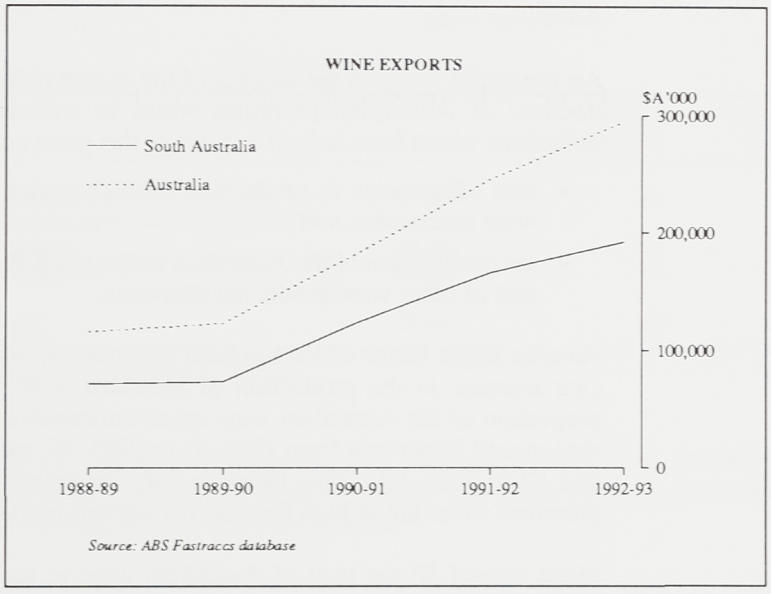
The Riverland and Barossa regions dominate fresh grape processing in South Australia, accounting for 79 per cent of South Australia's processing and 40 per cent of Australia's.

The five main premium grape varieties used for winemaking in Australia in 1991–92 were the red varieties, Shiraz and Cabernet Sauvignon and the whites, Chardonnay, Riesling, and Semillon. Almost 8 per cent of grapevines planted in Australia are not yet bearing, with Cabernet Sauvignon, Chardonnay and Shiraz dominating the newer plantings.

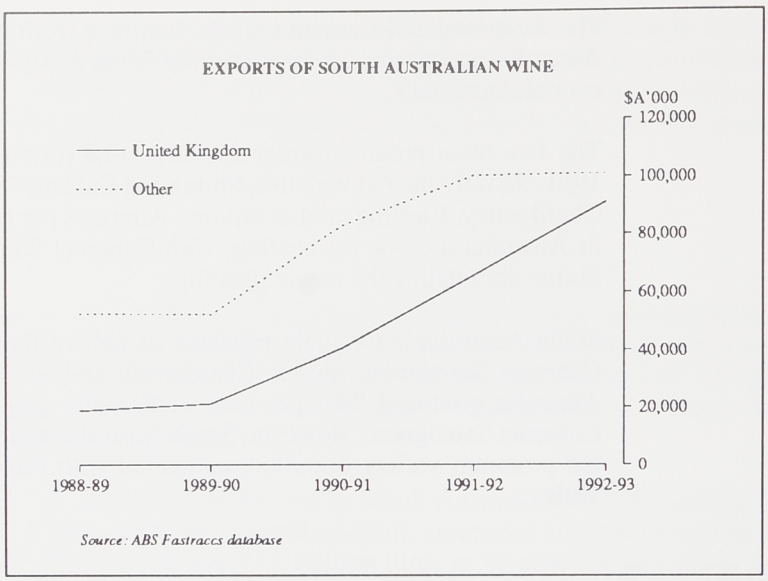
South Australia is the main producer of four of the premium grape varieties Cabernet Sauvignon, Shiraz, Chardonnay and Riesling. In 1991–92 South Australia produced 78.9 per cent of Riesling grapes and 70.6 per cent of Cabernet Sauvignon. However, South Australia produces only 29.3 per cent of the premium variety Semillon, compared with 66.9 per cent in New South Wales.

EXPORTS

The last few years have seen a rapid growth in exports of Australian wine, the majority of which are from South Australia. In 1992–93, 65 per cent of wine exports were South Australian.



South Australia's major overseas markets are the United Kingdom, the United States of America, Sweden, New Zealand and Canada. In 1992–93 the value of exports to these five countries made up 85 per cent of the State's wine exports. Exports to the United Kingdom are particularly high, making up nearly half of the wine exports.



Other countries world–wide are buying South Australian wine. Countries as diverse as Bangladesh, China, Denmark, Fiji, Germany, Hong Kong, Ireland, Japan, Netherlands, Singapore and Vanuatu all buy significant amounts of South Australian wine.

An important factor in the success of the export industry is the price competitiveness of Australian premium wines in overseas markets. Two major influences which have helped to achieve this price competitiveness are:

- cost efficiencies in production through major rationalisations amongst wine companies; and
- the devaluation of the Australian dollar since 1985, relative to the currencies of other wine producing countries.

Another major factor which has been essential for export growth is the significant increase in the production of premium wine grapes since 1986. The proportion of the Australian wine crush attributable to premium wine grapes was around 36 per cent from 1980–81 to 1985–86, increasing to 44 by 1986–87 and 52 in 1991–92. This factor is very important because only Australian premium wines are in high demand in overseas markets.

Since around 50 per cent of Australian wine is sourced from non–premium variety grapes, the industry is very dependent on domestic sales. In 1992–93, three–quarters of Australian wine sales were within Australia. This dependency varies between wine regions, and with about 70 per cent of the Riverland wine grape production being of non–premium varieties, providing nearly half of Australia's non–premium wine production, this region is particularly dependent.

SOUTH AUSTRALIAN WINE REGIONS

The Riverland Region

The Riverland of South Australia is the largest single wine grape growing region in Australia. The Riverland comprises a number of horticultural regions adjacent to the River Murray. Irrigation was introduced by the Chaffey brothers at Renmark in 1887. Distilleries were set up from 1917 to 1919 to utilise unwanted drying grapes. Soldier settlement schemes were established after both the 1914–18 and 1939–45 Wars.

Soils are grey and brown clays on the river valley terraces, while soils in the Mallee highlands are mainly deep red sands or loamy sands. All vineyards are irrigated with water from the River Murray.

The Riverland has high summer temperatures and annual rainfall of 274 millimetres.

The warm climate of the region produces wines that generally show ripe fruit characters and a softness that allows them to be enjoyed when young. Premium wines from the area have had good wine show successes, with Chardonnay, in particular, receiving acclaim. These Chardonnays offer rich and full bodied flavours. Red wines from the area are known for their ripe fruit and soft tannin structure, allowing for early consumption. The warm climate is also well suited to the production of fortified wine, such as Sherry, Port and Liqueur Muscat.

Riverland Statistical Summary

	Tonnes	*Per cent of South Australia*	*Per cent of Australia*
Annual crush *(a)*	125,000	44	22
Grapes produced for winemaking *(a)*:			
Red grapes	44,000	44	30
White grapes	126,000	65	35
Total	*170,000*	*58*	*33*

(a) Average for last 6 years to 1991–92.

In 1991–92 the Riverland produced 52.5 million litres of wine, of which 32.7 million litres was red and white table wine and sparkling wine, the remainder being fortified wine or distillation wine.

Although production data is not available because of confidentiality restrictions, several remaining Australian brandy distilleries are located in the Riverland.

In 1991–92, 73 per cent of grapes produced in the Riverland for winemaking were white, compared with South Australia and Australia at 63 per cent and 69 per cent respectively.

The table below shows the major grape varieties used for winemaking in 1991–92 for the Riverland compared with South Australia and Australia.

Major Grape Varieties

	Per cent of production		
Variety	*Riverland*	*South Australia*	*Australia*
Muscat Gordo Blanco	23	13	14
Sultana	14	7	10
Grenache	8	8	5
Doradillo	7	4	3
Shiraz	7	11	10

The varieties with the greatest area of vines not yet bearing, reflect the move by Riverland growers to adjust their varietal balance more in line with current demand. Chardonnay, Ruby Cabernet, Shiraz and Cabernet Sauvignon lead the way.

The Barossa Valley and Eden Valley

The Barossa and Eden Valley region is considered by many to be Australia's premier wine producing district.

Barossa and Eden Valley Statistical Summary

	Tonnes	*Per cent of South Australia*	*Per cent of Australia.*
Annual crush *(a)*	99,000	35	18
Grapes produced for winemaking *(a)*:			
Red grapes	19,000	18	13
White grapes	29,000	15	8
Total	*48,000*	*16*	*9*

(a) Average for last 6 years to 1991–92.

In 1991–92 the Barossa and Eden Valleys produced 126.6 million litres of wine, 94.1 million litres being red and white table wine and sparkling wine, 8.8 million litres fortified wine, and 23.6 million litres distillation wine. Several remaining Australian brandy distilleries are also located in the Barossa.

In 1991–92, 42 per cent of grapes produced in the Barossa for winemaking were red, compared with 37 per cent and 31 per cent for South Australia and Australia respectively.

The distribution of the major varieties produced in the region, compared with South Australia and Australia, are shown in the following table.

Major Grape Varieties

Variety	Per cent of production		
	Barossa and Eden Valleys	*South Australia*	*Australia*
Shiraz	15	11	10
Riesling	14	9	7
Semillon	14	3	7
Grenache	13	8	5
Chardonnay	8	7	9
Cabernet Sauvignon	7	10	8

Analysis of the varieties of vines not yet bearing, indicates Barossa growers are consolidating existing plantings of the premium varieties Shiraz, Cabernet Sauvignon, Chardonnay and Semillon.

Barossa Valley

Vines were first planted in 1847 in the Barossa Valley. By 1986, wineries owned about 10 per cent of the total vineyard area, the rest being owned by independent grape growers.

The Barossa Valley is a 'hanging valley' at 180 to 290 metres elevation, bounded on the east by the Barossa Ranges that rise to more than 600 metres at the southern end, and separate the Barossa Valley and Eden Valley. The area has moderate annual rainfall, increasing from 490 millimetres to 690 millimetres from north to south, with marked winter dominance, high summer evaporation and low relative humidity.

The most important vineyard soils are:

- red–brown earths with sandy loam to clay loam topsoil over red–brown clay subsoil, of reasonable structure and drainage;
- sand over clay and deep sands;
- alluvial soils of deep uniform profile, well drained, fertile and acid to neutral reaction; and
- dark cracking clays with self–mulching surface soils and deep uniform clay profiles of alkaline reaction and highly fertile.

Most vineyards have limited irrigation, mainly by drip systems.

The many producers situated within the Barossa Valley produce almost every wine style. Shiraz and Riesling have been noted traditional styles. The Riesling tends to be quite full–flavoured, rich and forward and the Shiraz also tends to be quite full–bodied with rich, ripe fruit flavours. Very good examples of other premium varieties such as Semillon, Chardonnay and Cabernet Sauvignon are also widely produced.

Eden Valley

Eden Valley has in the past been referred to as the 'Barossa Ranges' and a considerable amount of its fruit is purchased by wineries in the Barossa Valley for processing. However, Eden Valley has a different climate to that of the Barossa Valley and has established itself through its characteristic wine styles as a region in its own right. Its highest point is Pewsey Vale Peak at 630 metres and it is probably more easily compared to the Adelaide Hills Region.

The high altitude of the Eden Valley and resultant cool climate give vines a long and slow ripening period, typically producing wines of elegance and intense varietal character. It is considered to be one of the finest areas for producing aromatic styles such as Riesling and Traminer.

High quality red wines are produced from both Shiraz and Cabernet Sauvignon. They usually show intense varietal characteristics typical of cool climate areas.

The Eden Valley winemakers have joined with the Adelaide Hills winemakers at organisational and promotional level and, the Adelaide Hills & Eden Valley Winemakers' Association is currently undertaking a survey of their regions to determine such statistics as grape production, bearing and non–bearing hectares and varieties grown.

The South East Region

The South East is comprised mainly of the wine growing districts of Coonawarra and Padthaway, although a number of vineyards have been planted in other areas in the region.

South East Statistical Summary

	Tonnes	*Per cent of South Australia*	*Per cent of Australia*
Annual crush *(a)*	24,000	8	4
Grapes produced for winemaking *(a)*:			
Red grapes	19,000	18	13
White grapes	18,000	9	5
Total	*37,000*	*12*	*7*

(a) Average for last 6 years to 1991–92.

In 1991–92, 54 per cent of grapes produced in the South East for winemaking were red, much higher than the proportions for South Australia and Australia. The following table shows the distribution of the region's major varieties, compared with South Australia and Australia.

Major Grape Varieties

	Per cent of production		
Variety	*South East*	*South Australia*	*Australia*
Riesling	26	9	7
Cabernet Sauvignon	23	10	8
Shiraz	19	11	10
Chardonnay	12	7	9

Analysis of the varieties of vines not yet bearing, indicates growers in the South East are consolidating existing plantings of the premium varieties Cabernet Sauvignon, Shiraz and Chardonnay. Sixteen per cent of the South East's vines are not yet bearing, compared with 9 per cent for SA and 8 per cent for Australia. This indicates that the vineyard development in the South East over the past few years has been occurring at a greater rate than elsewhere in South Australia and Australia.

Coonawarra

The first vineyards at Coonawarra were planted in the 1890s but rapid growth occurred after the mid–1960s when large wineries expanded their plantings. Large wineries still dominate plantings in Coonawarra, although there are a growing number of small family wine brands being established.

Vineyards in the Coonawarra are restricted to a flat narrow north–south strip of land 20 kilometres long with an elevation of 60 metres. Plantings are found on limited areas of well drained soil, and a narrow strip of red soil commonly termed 'terra rossa' is extensively used. The area has moderate winter–dominant rainfall (646 millimetres per annum), moderate temperatures during the growing season, high relative humidity and moderate solar radiation.

Coonawarra Cabernet Sauvignon has a world–wide reputation for its high quality. These wines are renowned for their elegance, length of flavour and ageing ability. It is often blended with Merlot, Cabernet Franc and Malbec to add extra complexity and dimension. Shiraz from the district is also of premium quality often showing cool climate varietal characteristics.

Whilst the area is best known for its red wines, Chardonnay and Sauvignon Blanc grapes also produce high quality wines. Chardonnay from this region is also used for sparkling wines.

Padthaway

The Padthaway area is 90 kilometres north of Coonawarra and was established in the 1960s and 1970s. As with Coonawarra, large wineries dominate the plantings at Padthaway.

Padthaway is basically a growing area, with most of the area's fruit being transported elsewhere for processing. A feature is that the vineyards are large with modern trellising designed for mechanical pruning and harvesting.

The area is situated within the Padthaway Proclaimed Region, which defines the availability of water resources. The majority of vineyards in the Padthaway area are planted on a plain at the foot of a low range of hills. The main soils are red–brown earths on the plain with red–brown sandy loams and loams of usually less than 0.45 metres depth over limestone on the flanks of the hills. The climate is similar to Coonawarra but annual rainfall is lower (526 millimetres) and summer temperatures are higher. As irrigation is more necessary than in the Coonawarra, 90 to 95 per cent of vineyards are watered by furrow, travelling irrigator, fixed overhead sprinkler or drip systems.

Although high quality red wines have been produced from the area, it is the quality and consistency of its white wines for which Padthaway is best known. Chardonnay, Sauvignon Blanc and Riesling grapes of high quality are consistently produced, often being blended with material from other areas to produce some of Australia's most popular brands.

The Central Region

The Central region incorporates the Southern Vales, Adelaide Hills, Adelaide Plains, Langhorne Creek and Currency Creek areas.

Central Statistical Summary

	Tonnes	*Per cent of South Australia*	*Per cent of Australia*
Annual crush *(a)*	27,000	9	5
Grapes produced for winemaking *(a)*:			
Red grapes	15,000	15	10
White grapes	12,000	6	3
Total	*27,000*	*9*	*5*

(a) Average for last 6 years to 1991–92. Crush detail for Adelaide Statistical Division and Fleurieu Peninsula, production data for the Central Phylloxera Board District.

In 1991–92, the region produced 20.5 million litres of wine, 19.2 million litres being unfortified red and white table wine and sparkling wine. Fifty nine per cent of grapes produced for winemaking in the region were red, much larger than the South Australian and Australian proportions.

The table below shows the major varieties produced in the Central region, comparing their distribution with South Australia and Australia.

Major Grape Varieties

	Per cent of production		
Variety	*Central*	*South Australia*	*Australia*
Cabernet Sauvignon	21	10	8
Shiraz	19	11	10
Chardonnay	14	7	9
Grenache	9	8	5
Riesling	9	9	7

Varieties with vines not yet bearing in the Central region are mainly the premium red varieties Cabernet Sauvignon and Shiraz, and the premium white variety Chardonnay.

Southern Vales

The Southern Vales area is forty kilometres south of Adelaide, generally described as the area bounded by Sellicks Beach and Willunga in the south, to O'Halloran Hill in the north and McLaren Flat in the east.

The first vines were planted in the Southern Vales soon after South Australia was proclaimed in 1836. Plantings were concentrated in the McLaren Vale – McLaren Flat area and most are owned by wineries. The majority of vineyards

are found on flat to gentle undulating land within 12 kilometres of the sea. The area experiences warm summers, moderate winters, winter dominant rainfall (656 millimetres annual), low relative humidity and relatively high evaporation. There is a wide range of soil types, including podsolic soils of low fertility, fertile red–brown earths, terra rossa, rendzina, solodic and dark cracking soils. Underground water is available for irrigation but is variable in quantity and quality: the most common form of irrigation being drip systems.

The Southern Vales has a long tradition and reputation for red and fortified wines, but has also gained recognition for the quality of its white wines in more recent times. McLaren Vale Shiraz has traditionally been the area's most identifiable style and is now complemented by other premium red grape varieties such as Cabernet Sauvignon and Merlot. Chardonnay and Sauvignon Blanc have proved extremely successful within the region, producing white wines of great richness and body.

The fortified wine styles of the area are highly regarded, with the region producing many of Australia's greatest vintage ports.

Adelaide Plains

The vineyard area near Angle Vale and Virginia was developed in the 1940s and mainly consists of small vineyards planted on red–brown earths and calcareous earths of the flat Adelaide Plains. The climate is characterised by low, winter dominant rainfall (441 millimetres) and very high summer evaporation due in part to the high wind–run. The majority of vineyards are irrigated from underlying aquifers, most commonly by drip systems.

Langhorne Creek

The first vineyard in the Langhorne Creek area was planted in 1858. Today the vineyard plantings are on a gently and slightly undulating plain traversed by the Bremer and Angas Rivers. Low winter dominant rainfall (410 millimetres), high relative humidity and moderate temperatures during the growing season characterise the climate, which also features a limited day time temperature rise due to cooling sea breezes in the afternoon. Most vines are on deep alluvial soils that are slightly acidic red–brown sandy loams over one metre deep, or more shallow grey–brown clay loam topsoils over friable clay. Normal irrigation along the Bremer River in winter is by controlled flooding, whose water is dammed and distributed through levee banks.

The area is best known for its red wine styles, which typically show strong varietal characters and soft tannins.

Adelaide Hills

Generally described as the South Mount Lofty Ranges area bounded by Mount Pleasant in the north, Mount Compass in the south and the City of Adelaide in the west.

Plantings of vineyards in the Adelaide Hills area have expanded rapidly in recent years in a variety of locations spread throughout the South Mount Lofty Ranges. It is a cooler climate region; mean January temperature at Lenswood, for example, is 19.5 degrees.

This very cool climate produces wines of intense varietal characters and elegance. It has been particularly successful with early ripening varieties such as Pinot Noir and Chardonnay, the traditional varieties used in France's famous cool climate areas, Champagne and Burgundy. These two varieties are used to produce premium sparkling wine and table wine styles. Sauvignon Blanc from the area shows intense varietal characters. Other varieties that have shown promise include Semillon, Merlot and Cabernet Sauvignon.

The Clare Valley Region

Vines were first planted at Clare in the 1840s and are now located between Clare and Auburn. Over recent years, development of vineyards by large winery companies has been a feature and the number of growers has fallen. The terrain is undulating to hilly and vineyards are found between 425 and 500 metres altitude. Among the variable soils, vineyards are planted on slopes on red and yellow podsolic soils and, on the valley floor, on red brown earths with good water holding capacity. The Clare Valley has a micro–climate of its own which is similar to the more elevated parts of the Eden Valley and Adelaide Hills, with annual rainfall of 634 millimetres falling mainly in the winter months.

Most vineyards are not irrigated but some use drip irrigation from bores and farm dams.

Clare Statistical Summary

	Tonnes	*Per cent of South Australia*	*Per cent of Australia*
Annual crush *(a)*	9,000	3	2
Grapes produced for winemaking *(a)*:			
Red grapes	5,000	5	2
White grapes	9,000	5	3
Total	14,000	5	3

(a) Average for last 6 years to 1991–92. Crush detail for the Lower North Statistical Subdivision, production data for the Northern Phylloxera Board District (including the Port Lincoln region).

In 1991–92 the Clare Valley produced 6.1 million litres of red and white table wine and sparkling wine. Forty–two per cent of the grapes produced for winemaking were red.

Major Grape Varieties

	Per cent of production		
Variety	*Clare Valley*	*South Australia*	*Australia*
Riesling	25	9	7
Cabernet Sauvignon	18	10	8
Chardonnay	14	7	9
Shiraz	12	11	10

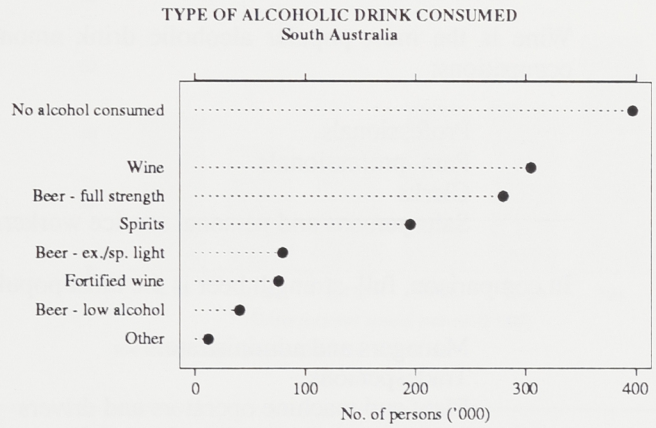
Main varieties in the Clare Valley with vines not yet bearing are the premium red varieties, Cabernet Sauvignon and Shiraz.

The area is famous for the quality and consistency of its premium dry Riesling, which shows strong aromatic fruit characters whilst young, and gains great

complexity with bottle age. Semillon produces a high quality wood–aged white wine style. High quality red wines are produced from Cabernet Sauvignon and Shiraz, with Merlot and Malbec commonly blended with Cabernet Sauvignon.

CHARACTERISTICS OF SOUTH AUSTRALIAN WINE DRINKERS

In the ABS 1989–90 National Health Survey, people aged 18 years and over were asked whether they drank any alcohol during the week prior to interview, and if so, what type of drink. From approximately 1 million people aged 18 years and over in South Australia, around 300,000 had drunk some wine during that week. Wine was more popular than any other category of drink (although this number was exceeded by those who did not drink alcohol at all).



Source: ABS Catalogue No. 4380.4

Although more South Australians drink wine than full–strength beer, a greater quantity of full–strength beer is consumed than wine. The average daily alcohol intake of full–strength beer is 27.3 millilitres per beer drinker, compared with 11.9 millilitres of wine (per wine drinker). This is also reflected by the average expenditure as South Australian households spend an average of $3.47 per week on wine (slightly more than the Australian average of $3.07 per week) compared with $8.48 per week on beer.

Sex and age

Wine apparently appeals to more women than men (although these men in aggregate consume around the same volume of wine as women). During the survey week, 174,700 South Australian women drank wine, 104,700 drank spirits, and 46,100 drank full–strength beer. For every schooner of regular beer consumed, around 2 nips of spirits, and 3 or 4 small glasses of wine are consumed. (These figures only change slightly if low alcohol and extra/special light beer is taken into account.) Wine is a popular drink among women aged between 45 and 65 years. Nearly three–quarters of those who drink alcohol in this age group drink wine.

Although more women drink wine than either spirits or full–strength beer, the average daily alcohol intake from each (per wine–drinker, per spirit–drinker or per beer–drinker) is about the same, at around 9 millilitres to 11 millilitres.

The men are almost a mirror image of the women. Full–strength beer is by far the most popular drink among men. During the survey week 233,300 South Australian men drank full–strength beer compared with 129,700 who drank wine. For every small glass of wine around three schooners of full–strength beer are consumed. The difference is most notable among men aged less than 55 years. Over 55 years, there are about the same number of men who drink wine as full–strength beer.

The average amount of alcohol that male beer drinkers consume from their beer is far more than male wine drinkers from their wine. Specifically, the average daily intake from beer is 30ml compared with 15ml from wine.

Occupation

Wine is the most popular alcoholic drink among people in the following occupations:

Professionals
Para–professionals
Clerks
Salespersons and personal service workers

In comparison, full–strength beer is the most popular drink among:

Managers and administrators
Tradespersons
Plant and machine operators and drivers
Labourers and related workers

These observations are usually consistent with the sex distributions among the occupations.

However a notable exception is professionals. Among professionals wine is the most popular drink for both men and women. The total number of professionals who drank wine during the survey week was 40,300, compared with 25,800 professionals who drank full–strength beer.

Birthplace

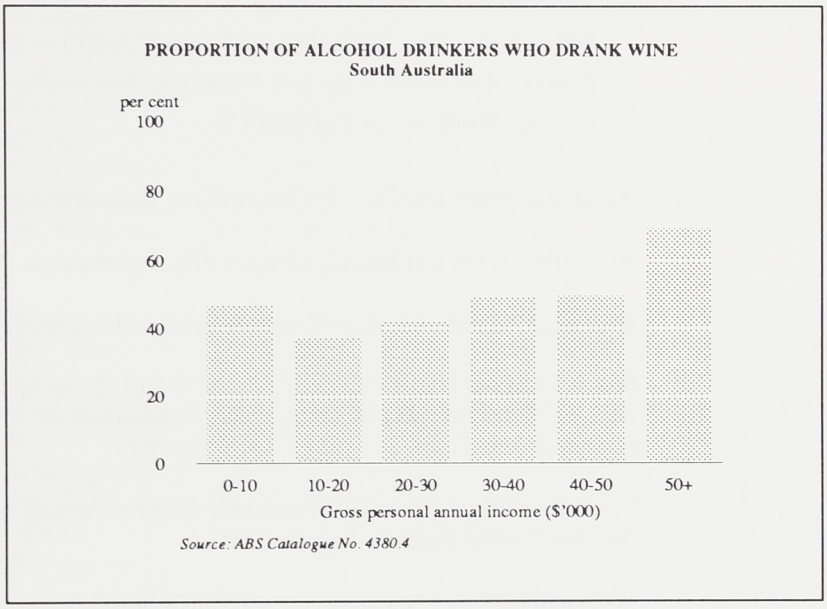
Wine is the most popular alcoholic drink among South Australians of every birthplace for which data is available.

Even so, the differences between men and women evident among the Australian born are also evident among the overseas born. For example, men born in the United Kingdom and Ireland prefer full–strength beer, while the women prefer wine. There were 27,600 women born in the United Kingdom or Ireland who drank wine during the survey week, compared with only 6,900 who drank full–strength beer. In comparison, 20,800 men born in the United Kingdom or Ireland drank wine, compared with 35,900 who drank full–strength beer.

However, wine is the most popular drink among South Australian males born in Southern Europe. During the survey week 15,500 males born in Southern Europe drank wine compared with 12,800 who drank full–strength beer

Income

The following graph clearly shows that wine becomes a more popular drink as income increases. It is also apparent that wine is a very popular drink for people in the lowest income category, possibly due to the availability of cheap wine.



The dangers

Despite the wide popularity of wine in the community, and the obvious positive contribution of the industry to the South Australian and Australian economies, the costs (simply by virtue of its being alcoholic) must not be ignored.

Alcohol can be responsible for many serious problems. Strong links have been made between alcohol and road traffic accidents, violent crime and health problems. The annual cost of health care for alcohol related illnesses and problems has been estimated to be nearly $600 million.

The wine industry has not ignored the dangers of its product. It has been stated by the Australian Wine & Brandy Corporation, 'The Australian wine industry fully recognises that it has a responsibility to the Australian community to encourage the sensible, moderate consumption of wine and wine based products'. The industry has been involved in various initiatives designed to reduce the misuse of wine.

Information about the effects of alcohol consumption is readily available from the Drug & Alcohol Services Council, a State–wide organisation offering a range of preventative and treatment services related to drug and alcohol issues.

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SPECIAL SUPPLEMENT

A unique article *Oenography, Words on Wine in the State Library of South Australia* has also been included as a supplement to the *South Australian Year Book 1994*.

This supplement was written by Valmai Hankel, Manager, Rare Books and Special Collections, State Library of South Australia, and examines the collections of wine books held in the State Library.

KANGAROO ISLAND

Size and location

Kangaroo Island is the dominant island off the South Australian coastline and lies near the mouth of Gulf St Vincent. It is thirteen kilometres from the mainland at its closest point and is separated from the mainland by Investigator Strait to the north and Backstairs Passage to the east.

It is Australia's third–largest island and is nearly seven and a half times the area of Singapore and over four times the area of Hong Kong. The Island covers an area of 4,350 square kilometres and has a circumference of 480 kilometres. It is approximately 145 kilometres long, up to 55 kilometres wide and approximately 300 metres above sea level at its highest point.

Land formation and soils

Kangaroo Island is structurally an extension of the Mount Lofty–Flinders Ranges system (Mount Lofty Horst). The underlying rocks are derived from sediments deposited in a basin over 500 million years ago. These sediments were subsequently folded by movements in the Earth's Crust and extruded by granite. Since that time the rocks have been eroded by various weathering agents including glaciation. Occasional earth tremors still occur in this region even though the faulting which resulted in the uplift of the Mount Lofty Horst and subsidence of the Spencer and St Vincent Grabens was accomplished sixty million years ago.

The greater part of the Island is occupied by a plateau region with high vertical cliffs in the north and a belt of low–lying country along the south coast.

It is interesting to note that the gravelly ironstone soils of Kangaroo Island are among the most impoverished in the world, containing only between 5 and 40 parts per million of phosphorous in their surface soils.

Vegetation

The vegetation of Kangaroo Island is most commonly described by both scientist and layman as 'interminable scrub'. It is generally a thick sclerophyllous cover between three and ten metres in height dominated by eucalypts, with Melaleucas and Acacias as the principal secondary genera. Many of the eucalypts exhibit the mallee morphology. The density and small nature of individual trees made clearing slow, laborious and expensive. There are few species of commercial value on the Island.

Different species of eucalypt are dominant in different regions. The species that dominates depends on the rainfall and soil constituents of the area. Kangaroo Island offers a variety of native vegetation.

Dry sclerophyll forest occurs in its natural state in Flinders Chase and is of the same type as that found in parts of the Mount Lofty Ranges.

The waters surrounding Kangaroo Island moderate the Island's climate which can be briefly described as a cool temperate climate with a winter rainfall maximum. Adelaide, by comparison, has a warm temperate climate, with a winter rainfall maximum. The ridge of high ground in the western section of the Island introduces noticeable local variations in climate, particularly rainfall, over small areas.

Rainfall

The annual average rainfall on Kangaroo Island ranges from 478 mm at Cygnet River to more than 850 mm on the uplands of the western section. A secondary rainfall maximum with averages greater than 600 mm occurs on the eastern end of the Island.

The monthly distribution of rainfall is shown in the following table. Approximately 10 per cent of the average annual rainfall is recorded during summer, compared with approximately 45 per cent during the winter months. Spring and autumn rainfall is approximately 20 and 25 per cent, respectively, of the annual average total.

Average Rainfall and Days of Rain: Selected Stations, Kangaroo Island

Period	*American River*	*Cape Borda*	*Cape du Coeudic*	*Cape Willoughby*	*Cygnet River*	*Kingscote*	*Parndana*
AVERAGE RAINFALL (millimetres)							
January	16	15	16	19	17	14	17
February	18	17	25	18	20	17	21
March	17	24	24	21	15	18	29
April	39	47	48	41	36	36	49
May	61	81	75	63	53	59	76
June	77	108	105	76	67	72	88
July	86	107	111	83	79	78	102
August	75	88	83	75	68	66	86
September	55	56	57	56	43	47	64
October	40	41	41	43	38	36	45
November	25	26	30	29	24	23	29
December	21	21	25	23	16	19	24
Year	**532**	**633**	**638**	**546**	**478**	**486**	**627**
AVERAGE NUMBER OF DAYS OF RAIN							
January	2	5	5	5	3	3	6
February	2	5	5	4	3	3	7
March	4	7	8	6	4	5	10
April	7	12	12	10	8	9	13
May	11	17	17	15	11	13	18
June	15	19	19	17	15	16	19
July	17	21	20	19	18	18	22
August	16	20	18	18	16	17	21
September	12	16	15	15	13	13	19
October	8	13	12	12	9	10	15
November	4	9	9	8	6	7	11
December	4	8	7	7	5	5	9
Year	102	152	147	136	111	119	170

The growing season on Kangaroo Island generally commences in mid–April and continues until late October.

(Courtesy of Royal Automobile Association of SA)

Temperature

Monthly mean maximum and minimum temperatures for selected stations are shown in the following tables.

Mean Maximum Temperatures: Selected Stations, Kangaroo Island
°Celsius

Period	*Cape Borda*	*Cape du Coeudic*	*Kingscote*	*Parndana*
January	23.1	21.9	24.8	25.0
February	23.4	22.6	24.3	25.3
March	21.0	21.4	22.8	22.6
April	18.7	20.4	20.5	20.2
May	16.3	17.5	17.9	16.7
June	14.6	15.3	15.8	14.4
July	13.8	15.0	14.9	13.6
August	14.0	14.6	15.3	14.1
September	14.9	15.3	16.7	15.3
October	16.9	18.2	19.1	17.8
November	19.2	18.6	21.1	20.7
December	21.0	20.2	22.9	23.2
Year	**18.1**	**18.4**	**19.7**	**19.1**

Mean Minimum Temperatures: Selected Stations, Kangaroo Island
°Celsius

Period	*Cape Borda*	*Cape du Coeudic*	*Kingscote*	*Parndana*
January	13.8	14.4	15.2	12.6
February	14.3	15.4	15.6	13.3
March	13.5	14.8	14.5	12.1
April	12.5	14.5	12.6	10.6
May	11.1	11.5	10.7	9.0
June	9.8	10.5	9.2	7.3
July	8.9	10.1	8.3	6.6
August	8.8	9.3	8.3	6.6
September	9.1	9.6	9.1	7.0
October	9.8	11.4	10.4	8.0
November	11.2	11.9	12.1	9.3
December	12.6	n.a.	13.7	11.1
Year	**11.3**	**n.a.**	**11.6**	**9.5**

The average daily maximum temperatures in summer are between 20°C and 25°C, but extreme values of over 40°C have been recorded. During winter, the average maxima range from 13°C to 15°C. On occasional days, the maximum temperature may not reach 10°C. Mean daily minima range from 10°C to 15°C in summer and from 6°C to 10°C in winter. Extreme minima have been colder than –3°C.

The moderating influence of the sea is particularly noticeable at coastal stations where the average temperature range is smaller than the inland station at Parndana. Average monthly temperatures (the average of the mean daily/monthly maxima and minima) have special significance to agriculture. During the winter months, the average temperature approaches 10°C and plant growth is retarded. This effect would be most noticeable inland.

During summer, coastal areas are slightly more humid than those inland, but in the winter, the difference is marginal.

Frosts

Light frosts occur infrequently, generally between May and September, although frosts are more frequent in those localities where air drainage is poor.

Wind

In summer, the predominant wind direction at 9 a.m. is from the south to south–east. Wind speeds generally range from 13 to 25 kilometres per hour. At 3 p.m. the prevailing winds are from the south–east to south–west quadrant, with the most frequent wind speeds again ranging from 13 to 25 kilometres per hour. Wind direction at 3 p.m. is largely dependent on the sea breeze effect and the orientation of the coastline. Winds from the south–west tend to be more common at the western end of the Island.

In winter, wind speeds of 15 to 30 kilometres per hour are most frequent. The predominant wind directions at 9 a.m. and 3 p.m. are from north to west. However, winds from the south–west are also frequent at Cape Borda.

Evaporation

Parndana is the only site on Kangaroo Island where evaporation has been measured. Monthly figures for a Class A Pan fitted with a bird guard range from 256 mm in January to 52 mm in July. An average total of 1,628 mm of evaporation is recorded annually.

History

Discovery

The first recorded sighting of Kangaroo Island was by Matthew Flinders in the *Investigator* on 20 March 1802. Flinders had sailed from England on 18 July 1801 on a voyage of discovery supported by the President of the Royal Society, Sir Joseph Banks.

On his voyage of circumnavigation of the Australian continent he thoroughly explored the coast of South Australia. After clearing Spencer Gulf, Flinders sought shelter from a south–westerly gale and named the sheltering coast of Kangaroo Island Point Marsden and the bay Nepean Bay, which he named after the First Secretary of the Admiralty.

On 22 March 1802, Flinders landed at Kangaroo Head. It was here that Flinders took his first survey and named Mount Lofty which can be plainly seen from the Head on a calm day. The crew of the *Investigator* had been without fresh provisions for some months and the morning was spent in the slaughter of thirty–one kangaroos. Flinders subsequently named the island Kangaroo Island.

Flinders sailed from Kangaroo Island on 24 March 1802 to complete his examination of Gulf St Vincent and while returning to Kangaroo Island named Investigator Strait after his ship. Flinders finally left Kangaroo Island on 6 April 1802 and, sailing eastward, gave the name Backstairs Passage to the narrow strait separating the Island and Cape Jervis. He also named the eastern extremity of the Island Cape Willoughby.

Sailing further eastward, Flinders met the French explorer Captain Nicholas Baudin at Encounter Bay on 8 April 1802. After the meeting at Encounter Bay, Baudin sailed westward and along the northern shore of Kangaroo Island to Murat Bay before being forced to abandon further exploration and to return to Port Jackson in June 1802. Baudin, after re–equipping his expedition, and with the addition of another ship (*Casuarina*) for charting work in shallow waters, returned to Kangaroo Island. Circumnavigating the whole Island he gave many places French names and renamed some of Flinders' discoveries, including the

Island which he named 'L' Isle Decreas'. Most of the places surveyed by Baudin have retained their French names including D'Estrees Bay, Cape Gantheaume, Vivonne Bay, Cape du Couedic, Cape Borda and Cape Cassini.

Colonisation

Although the discovery of Kangaroo Island did not lead to immediate colonisation, there began an increasing series of visits by sealing vessels. In 1803, a party of American sealers in the *Union* met Baudin off the coast of West Australia, learnt of Kangaroo Island and settled at American River to build a whaling boat. Apart from this party, there were possibly no other residents on the Island before 1806. Sealers also came from Sydney with Joseph Murrell to make their home at Harvey's Return on the north coast. The presence of salt on Kangaroo Island was a deciding factor for sealers using the Island as a base camp.

In 1804, the British sent Grimes, a government surveyor, to Kangaroo Island to report on it as a possible site for colonisation. The Grimes Report was most unfavourable, stating that the soil was poor and that the Island lacked fresh water. On the other hand, in 1819 Captain Sutherland visited the Island and wrote an overoptimistic report on its future. It was this report which later led the South Australian Company into establishing their first station there in 1836.

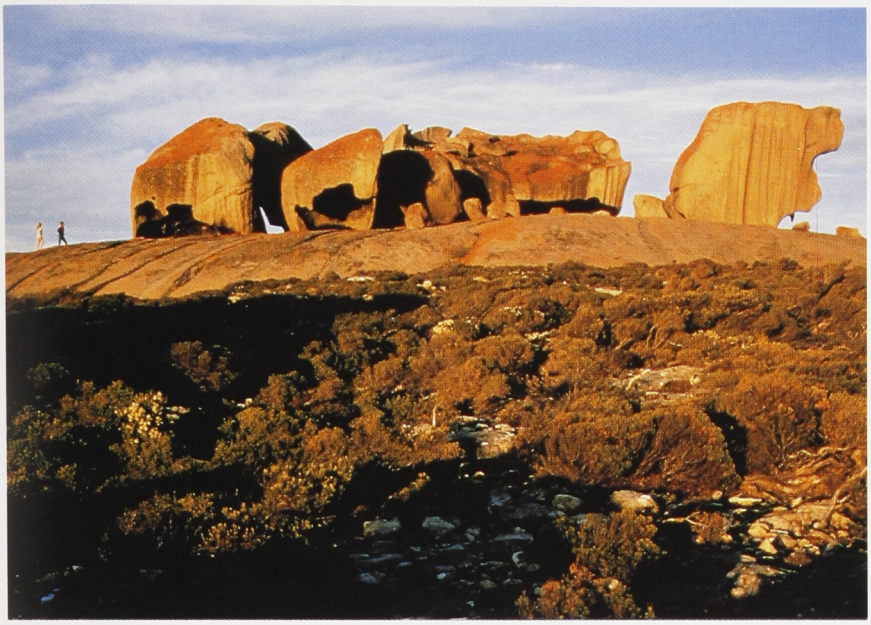
The *Duke of York*, the first ship charted by the Company to bring emigrants to this State, arrived at Nepean Bay on 27 July 1836. The site of the first settlement was chosen and named Kingscote in honour of the director of the South Australian Company.

In 1838, the small town of Kingscote had an estimated population of 400 and besides huts and tents the town had a boarding house, store, workshops and brick and stone cottages. However, in 1838, the South Australian Company moved its headquarters to Adelaide and the majority of inhabitants followed.

The Island's first official post office was opened at Cygnet River in 1870. A telegraph cable was laid from Kingscote to Normanville and communication established with Adelaide in 1875.

Around 1880 two pastoralists, Stockdale and Taylor, attempted to establish a large scale sheep industry. Despite reliable rainfall, the soils and pastures were generally unsuitable and brought failure to this and other similar ventures.

A further period of rural activity occurred in 1905 when it was thought that the application of superphosphate would improve the fertility of the soils. Agricultural yields did not improve markedly with the application of superphosphate and a further period of inactivity followed. During the 1930s it was found that the occurrence of 'coast disease' in sheep and the failure of pasture crops was due to deficiencies in copper and other elements in the Island's soils. Large scale rural development took place after these deficiencies were remedied. Kangaroo Island was officially gazetted a county (County Carnarvon) in 1874 and later the towns of Penneshaw, Brownlow and Maxwell (later Emu Bay) were proclaimed.



Remarkable Rocks,
Kangaroo Island,
in late afternoon light.

South Australian
Tourism Commission

Wiers Cove,
Kangaroo Island,
south coast.

South Australian
Tourism Commission

Leaving the ferry at Penneshaw, Kangaroo Island

South Australian Tourism Commission

Flinders Chase National Park, Kangaroo Island

South Australian Tourism Commission

Some little–known country close to Kangaroo Island's north coast, near Western River Cove.

Stuart Nicol, Royal Automobile Association of SA.

American River holiday resort, Kangaroo Island

South Australian Tourism Commission

Red Banks at
Nepean Bay,
Kangaroo Island

South Australian
Tourism Commission

Marron ready to be sent
to market.

The Advertiser

Surrounded by camembert and brie cheese at the Kangaroo Island Dairy, Penneshaw

The Advertiser

Scuba divers on Kangaroo Island

South Australian Tourism Commission

Pied stilts in the shallows of Murrays Lagoon.

Stuart Nicol, Royal Automobile Association of SA

Quiet times at Seal Bay, Kangaroo Island

South Australian Tourism Commission

Around the turn of the century, Kangaroo Island was gaining a reputation for its excellent fishing facilities and in 1907, the Ozone Hotel was built at Kingscote to cater for the increased tourist trade. In addition the 550 tonne ship *Karatta* began a regular service between Adelaide and Kingscote to handle the increasing number of visitors to the Island.

The population of Kangaroo Island was approximately 170 in 1860 and had risen to 700 by 1901 and 1,500 by 1947. At 30 June 1976 the population of the Island was 3,266 and at 30 June 1992 the population was 4,095.

Land tenure and settlement

It was not until the 1870s that any large areas of land were occupied on a permanent tenure although small pockets of land around Kingscote, along the Cygnet River, and at Penneshaw became freehold before 1860.

Reliable rainfall attracted cereal farmers to the Island and the hundreds of Menzies, Haines and Dudley were laid out and land was made freehold along the coast near Penneshaw. However, it was not until the first decade of the twentieth century that large sections were taken up when it was thought that the application of superphosphate would be sufficient to increase the fertility of soils.

Many graziers who had held large tracts of land under pastoral leases in the centre of the Island surrendered these for freehold 'concession blocks'. The State Government resumed the country under lease and granted the lessees the freehold of approximately 16 hectares per square kilometre of leased land for the nominal payment of 12 cents per hectare. Over 180,000 hectares were alienated in this manner. Further freeholding took place before 1920 around the bays and river mouths which were the only access points to station properties but in the main, few areas other than the 'concession blocks' were made freehold. Surveying of sections in the western hundreds stopped later when the application of superphosphate failed to increase soil fertility.

After the 1939–45 War, trace element deficiencies were remedied in the soils of the main plateau and the War Service Land Settlement Scheme resulted in the development of large areas of unoccupied Crown land held under pastoral lease. In 1948 full–scale logging operations commenced and by 1950 approximately 18,600 hectares had been logged and 5,000 hectares seeded.

In the period 1950–1961, development continued at an established rate of approximately 4,900 hectares annually (12 to 15 holdings annually). Development progressed with the final initial seeding being completed in May 1961.

By May 1966, when development under the War Service Land Settlement Scheme ceased, 103,477 hectares were held under War Service Perpetual Lease of which 57,754 hectares were developed to pasture by the Land Development Branch. In addition, 168 houses had been erected, 2,450 kilometres of fencing laid down and 550 dams excavated with a total storage capacity of 682 megalitres.

Other large tracts were taken up in the post–war years by private developers who hold the land under perpetual lease of freehold tenure.

Population

Kangaroo Island had a population of 3,901 at August 1991, representing 0.28 per cent of the State population. The population of the Island has a very high rural component with Kingscote being the only statistical local area on the Island with a population in excess of 1,000 (3,260 at 6 August 1991).

Population and Sex Ratio, Kangaroo Island and South Australia

	Census year				*Sex ratio (a)*
	1986	*1991*			
Area	*Persons*	*Persons*	*Males*	*Females*	*1991*
Dudley (DC)	670	641	340	301	113.0
Kingscote (DC)	3,338	3,260	1,654	1,606	103.0
Total Kangaroo Island	*4,008*	*3,901*	*1,994*	*1,907*	*104.6*
Total South Australia	**1,345,945**	**1,400,622**	**690,874**	**709,748**	**97.3**

(a) Number of males per 100 females.

The sex ratio of the population was considerably higher for Kangaroo Island (104.6 at August 1991) than for the total State (97.3 at August 1991).

The population of Kangaroo Island increased from 1,479 to 2,522 persons in the period 1947–54, an increase of 70.5 per cent. This high rate of increase corresponded with the clearing and development of large areas of land for farming. The rate of population growth has slowed markedly in recent years, growing only 14 per cent from 1981to 1986 and falling 3 per cent from 1986 to 1991.

The following table shows the Census population figures from 1981 for Kangaroo Island and South Australia.

Population, Kangaroo Island and South Australia

	Census year		
Area	*1981*	*1986*	*1991*
Dudley (DC)	569	670	641
Kingscote (DC)	2,946	3,338	3,260
Total Kangaroo Island	*3,515*	*4,008*	*3,901*
Total South Australia	**1,285,033**	**1,345,945**	**1,400,622**

The next table shows percentage birthplace figures for the population of Kangaroo Island and the State. This table shows that a very high proportion of the population of Kangaroo Island are Australian born, 88.1 per cent at the 1991 Census, while the corresponding State figure was 76.1 per cent.

Although overseas migration has been an important component of population growth for the State, the growth in the proportion of overseas–born persons on Kangaroo Island has been marginal.

Percentage Birthplace of Population, Kangaroo Island and South Australia

Country of birth	Census year 1981	1986	1991
KANGAROO ISLAND			
Australia	91.3	90.4	88.1
Other *(a)*	8.7	9.6	11.9
SOUTH AUSTRALIA			
Australia	76.9	77.4	76.1
Other *(a)*	23.1	22.6	23.9

(a) Also includes 'not stated' responses.

The next table shows the percentage age distribution of the population of Kangaroo Island and the State. The table indicates that the age distribution of Kangaroo Island and the State follow similar patterns, except that Kangaroo Island has a slightly lower age distribution in the 20–29 age group with only 11.8 per cent of the population in that age group compared with 15.8 per cent for the State and, a higher proportion aged under 10 years than the State.

Age Distribution of Population, Kangaroo Island and South Australia Census 1991

Age group (years)	Kangaroo Island Persons	Kangaroo Island Per cent	South Australia Persons	South Australia Per cent
0–9	671	17.2	198,772	14.2
10–19	546	14.0	202,619	14.5
20–29	462	11.8	220,633	15.8
30–39	631	16.2	223,751	16.0
40–49	575	14.7	187,178	13.4
50–59	357	9.2	128,621	9.2
60–69	342	8.8	122,630	8.8
70 and over	301	7.7	116,443	8.3
Total	***(a)*3,901**	**100.0**	***(a)*1,400,622**	**100.0**

(a) Small cells of data have been randomised for confidentiality purposes and may not add to the total. Age 'not stated' also included.

Births and deaths

When compared with the State as a whole, Kangaroo Island generally has a higher birth rate and a lower death rate.

Live Births: Number Registered and Rate, Kangaroo Island and South Australia

Year	Kangaroo Island Number	Kangaroo Island Rate (a)	South Australia Number	South Australia Rate (a)
1988	67	13.7	19,155	13.6
1989	60	14.7	19,610	13.8
1990	67	15.5	19,863	13.9
1991	66	15.5	19,640	13.6
1992	50	12.2	19,311	13.3

(a) Number of births per 1,000 mean population.

The sex ratio *i.e.* the number of male births per hundred female births, for Kangaroo Island was 114.8 for the period 1988 to 1992 compared with 106.7 for the total State.

Deaths: Number Registered and Rate, Kangaroo Island and South Australia

	Kangaroo Island		*South Australia*	
Year	*Number*	*Rate (a)*	*Number*	*Rate (a)*
1988	32	7.5	10,531	7.6
1989	26	6.0	10,690	8.0
1990	25	5.8	11,348	7.6
1991	31	7.3	10,938	7.7
1992	31	7.6	11,176	7.5

(a) Number of deaths per 1,000 of mean population.

Recreation

Sporting activities

Kangaroo Island has a full range of sporting facilities both for its inhabitants and visitors. Team sports are popular and tennis, basketball, cricket, bowls and softball are played. Netball and golf are also strongly supported.

The Kangaroo Island Football League is the administrative body for Australian Rules football, the most popular sport played on Kangaroo Island. There are five affiliated clubs with matches played between A and B grades and colts teams.

There are golf courses at Kingscote, Penneshaw, Vivonne Bay, Parndana and Birchmore. Surfing, swimming, fishing, yachting and power boating are all popular. The Bay of Shoals, near Kingscote, is reserved exclusively for power boats and yachting takes place on the broader waters of Nepean Bay. American River is a popular holiday resort and a point of departure for sightseeing and fishing trips organised by the local guesthouses.

A two day racing carnival is held in February each year at the Kingscote race course. This is the biggest non–TAB race meeting in South Australia.

Parks and Reserves

Kangaroo Island has many large tracts of land which have been set aside as National or Conservation Parks. The largest of these, Flinders Chase, was established as a fauna and flora reserve in 1919 and is situated at the western end of Kangaroo Island and encompasses an area of 74,000 hectares. It has become a refuge for fauna indigenous to the Island and also for mainland species in danger of extinction, such as the koala and platypus. Birds of 167 species have been recorded on the Island and most of these are found within the Chase.

The new Wilderness Protection Act ensures maximum protection of the ecological integrity of sections of the Chase and many of the Conservation Parks on Kangaroo Island.

A brief description of some of the major Conservation Parks on Kangaroo Island are detailed below:

Conservation Park	*Area (Hectares)*	*Description*
Beyeria	184	Established to conserve remnant endemic vegetation of the eastern end of Kangaroo Island.
Busby Islet and Beatrice Islet	10 10	Important breeding, feeding and roosting sites for waterbirds.
Cape Gantheaume	21,316	Located 48 km south of Kingscote. Very rough wilderness area of high coastal sand ridges with low limestone hills and outcrops. Also has dense dune vegetation and mallee eucalypt scrub. The Park possesses vast areas of wilderness, a fresh water lagoon and a plethora of bird species. Kangaroo Island kangaroos and Dama wallabies.
Cape Hart	311	Located 32 km south–east of Penneshaw. Coastal cliff top vegetation and dense mallee scrub. Kangaroo Island kangaroos and Dama wallabies.
Cape Torrens	917	On the north–west coast of Kangaroo Island with cliffs to 214 metres in height. Cliff top vegetation with some mallee scrub. Wildflowers are in abundance. Kangaroo Island kangaroos and Dama wallabies.
Dudley	1,122	South–west of Penneshaw, this Park contains tall mallee scrub of several species, including Kangaroo Island Narrow Leaf Mallee. Kangaroo Island kangaroos and Dama wallabies.
Kelly Hill	7,374	Located 89 km south–west of Kingscote. Coastal dunes and vegetation with eucalypt forest, mallee eucalypt scrub, heath and swamps inland. Contains beaches and the mouth of South West River. Popular cave formations which are open to the public. Kangaroo Island kangaroos, Dama wallabies, brush–tailed possums.
Lathami	1,190	A very scenic area on the north coast. Important glossy black cockatoo breeding and feeding area.

Mount Taylor	18	Located 80 km south–west of Kingscote. Small area set aside to protect the rare Trigger Plant. Limestone caves.
Nepean Bay	30	Small coastal park. Contains typical coastal sand plains habitat.
Parndana	421	Situated on edge of Kohinoor Plateau. Drops steeply 60 metres to a tributary of the Cygnet River. Kangaroo Island kangaroos and Dama wallabies.
Pelican Lagoon	366	Five small islands and a section of the mainland. The lagoon is an Aquatic Reserve where fish breed and is also an important waterbird refuge.
Seal Bay	700	Most notable feature is a colony of seals (Australian sea lions). Normally over 100 can be seen on the main viewing beach. Prohibited entry except by National Parks guided tour. Large area of bushland comprising mallee over limestone. Kangaroo Island kangaroos, Dama wallabies.
Seddon	24	Located 7 km south of Parndana and noted for eucalypt scrub, and forest. Kangaroo Island kangaroos and Dama wallabies.
The Pages	99	Situated in Backstairs Passage this reserve supports the largest known breeding colony of the rare Australian sea lion and significant seabird breeding colonies. Due to the significance and vulnerability of these wildlife locations, the Islands are a prohibited area.
Vivonne Bay	887	On south coast of Kangaroo Island, 64 km from Kingscote. Small area of coastal dunes with vegetation and cliff top vegetation. Large area of windswept coastal heath.
Western River	2,364	On the north coast of Kangaroo Island. Coastal scenery with steep gorges and waterfalls. Kangaroo Island kangaroos and Dama wallabies in eucalypt forest.

Health facilities

Kangaroo Island General Hospital is a 30–bed hospital located at Kingscote. It provides general medical, surgical and obstetric services to the Island population.

Visiting specialists include a general surgeon, orthopaedist, ophthalmologist, obstetrician and gynaecologist, gastroenterologist, physicians and psychiatrist.

There are three general practitioners who consult at the hospital and, at the health centres at American River, Parndana and Penneshaw one day per week.

Carnarvon Hostel is a 16 bed unit which provides hostel accommodation for the aged.

Community Health Centres are in Kingscote, American River, Parndana and Penneshaw. They are staffed by registered nurses on a part–time basis, providing casualty and community nursing and domiciliary care.

Community health services provide multi disciplinary community and para-medical care including: community nursing, domiciliary care, home help, Meals on Wheels, day care (Kingscote and American River), equipment and home modification, community bus, aged care assessment, physiotherapy, sessional and private practices and podiatry.

Dental services are provided by two Adelaide dentists visiting two days per week. The dental health of school children is provided by the resident school dentist who also provides emergency care to pensioners and health care card holders.

St John Ambulance is centred in Kingscote with first response units at Penneshaw and the Western End.

CAFHS is located in Kingscote and visits the other health centres on a regular basis.

A social worker, working from Kangaroo Island General Hospital, Kingscote provides care to all Islanders.

Employment

The following table shows that 29.1 per cent of all employed persons on Kangaroo Island (on Census night, 1991) worked in the agriculture, forestry, fishing and hunting industry group, followed by 13.8 per cent in wholesale and retail trade. Of all persons employed within community services, over 74 per cent were females.

Industry of Employed Persons, by Sex : Kangaroo Island, Census 1991

Industry	*Males*	*Females*	*Pesons*	*Per cent*
Agriculture, forestry, fishing etc.	327	120	447	29.1
Mining	6	3	9	0.6
Manufacturing	26	15	41	2.7
Electricity, gas and water	9	—	9	0.6
Construction	40	6	46	3.0
Wholesale and retail trade	106	106	212	13.8
Transport and storage	59	44	103	6.7
Communication	19	3	22	1.4
Finance, property and business services	19	50	69	4.5
Public administration and defence	30	6	36	2.3
Community services	52	150	202	13.2
Recreation, personal and other services	71	86	157	10.2
Other and not stated	103	78	181	11.8
Total *(a)*	**867**	**667**	**1,534**	**100.0**

(a) Small cells of data have been randomised for confidentiality purposes.

While the majority (45.9 per cent) of the labour force in Kangaroo Island were wage or salary earners, a relatively high proportion (34.7 per cent) were employers or self employed.

Occupational Status of the Labour Force: Kangaroo Island and South Australia Census 1991

	Kangaroo Island		*South Australia*	
Occupational status	*Persons*	*Per cent*	*Persons*	*Per cent*
Employer, self-employed	657	34.7	104,869	15.3
Wage or salary earner	870	45.9	493,154	72.1
Unpaid helper	56	3.0	6,012	0.9
Unemployed	310	16.4	80,315	11.7
Total labour force	**1,893**	**100.0**	**684,350**	**100.0**

On Census night in 1991, Kangaroo Island had a slightly higher proportion of persons (aged 15 years and over) without qualifications than the total State. However, despite its relatively small population, almost 4.4 per cent of persons on Kangaroo Island held a Bachelor degree or higher, compared with 6.4 per cent for all South Australia.

Level of Qualifications Obtained by Persons Aged 15 Years and Over Kangaroo Island and South Australia, Census 1991

	Kangaroo Island		*South Australia*	
Qualification level	*Persons*	*Per cent*	*Persons*	*Per cent*
Higher degree	23	0.8	8,524	0.8
Post graduate diploma	16	0.5	8,574	0.8
Bachelor degree	89	3.0	53,056	4.8
Undergraduate diploma	125	4.3	44,326	4.0
Associate diploma	22	0.8	13,275	1.2
Skilled vocational	230	7.9	110,576	10.0
Basic vocational	100	3.4	36,408	3.3
No qualification	2,028	69.2	706,528	64.0
Not stated, inadequately described	296	10.1	122,026	11.1
Total	**2,929**	**100.0**	**1,103,293**	**100.0**

On Census night in 1991, 19.9 per cent of persons aged 15 years and over reported an individual income of less than $5,000 per annum. The majority of persons on Kangaroo Island (35.0 per cent) earnt between $5,001 to $12,000 per annum, followed by 18.7 per cent in the $12,001 to $20,000 range. Less than one per cent reported annual income exceeding $70,000.

Water Supply and sewerage

There are reticulated water supply schemes in the townships of Kingscote, Parndana and Penneshaw.

The township of Kingscote is supplied from a reservoir of 470 megalitres capacity constructed on the Middle River, fifty kilometres west of Kingscote. Water from this reservoir is pumped approximately five kilometres to a 4.5 megalitres reinforced concrete surface tank and from there gravitates a distance

of forty-five kilometres to four surface tanks, with a total capacity of 22.5 megalitres at Kingscote. Farmlands along the route of the pipeline are also supplied and branch mains have been laid to supply the small township of Parndana and the Emu Bay district.

This scheme replaced in 1965 an earlier one which supplied Kingscote only with water pumped from the Cygnet River. Consumption from the Middle River Reservoir in 1992 amounted to approximately 317 megalitres.

The township of Penneshaw is supplied from a privately owned dam approximately four kilometres south–east of the township. Water is pumped from the dam to two surface tanks each of 136 megalitres capacity and from there gravitates through a pipeline to Penneshaw. The scheme was leased and operated by the District Council of Dudley, but was taken over by the Engineering and Water Supply Department on 1 July 1987.

There is no piped sewerage system in any of the towns on the Island and septic tanks are used extensively. A common effluent drainage scheme, which has an outfall to the sea, serves a number of dwellings in Kingscote.

Electricity and gas

Electric power is transmitted from the mainland to the Island by a 33,000 volt undersea cable across Backstairs Passage. This cable, installed in May 1993, replaced the one laid in April 1965. It is 13.7 kilometres long and is the longest undersea crossing of its type in Australia.

A 33,000 volt line carries power from a substation at Penneshaw to the American River and MacGillivray transformer stations, from which it is distributed to various parts of the Island by 11,000 volt lines.

Housing

Since 1971, the number of occupied private dwellings in Kangaroo Island has grown by 63.6 per cent, compared with 50.8 per cent for the State. Since caravans were only counted from 1986, data from earlier censuses are not strictly comparable with more recent figures.

Occupied Private Dwellings, Kangaroo Island and South Australia

	Census year		
Statistical local area	*1981*	*1986(a)*	*1991*
Dudley (DC)	198	238	253
Kingscote (DC)	964	1,120	1,180
Total Kangaroo Island	*1,162*	*1,358*	*1,433*
South Australia	**432,123**	**475,987**	**515,721**

(a) Caravans (in caravan parks) were counted from 1986.

Agriculture

The economy of the Island is based mainly on the raising of sheep for wool and meat but since the collapse of the floor price scheme for wool in 1991 and with beef cattle production plateaued, most farmers have looked to alternative enterprises.

These include farm hospitality/tourism, aquaculture (yabbies and marron), deer farming, poultry production, native flowers, cut flowers, cottage industries such as home spun wool, painting, etc. Individual markets continue in yacka gumming, sheep milking, export cheese production etc. Honey production has increased to 11 tonnes per year from the pure Ligurian strain of bees. An export sheep meat abattoirs operates seasonally near Kingscote.

During the 1930s it was found that deficiencies of copper and other elements in the Island's soils were responsible for 'coast disease' in sheep and the failure of pastures. It was considered that with the introduction of suitable trace elements and superphosphate, a vast area of land on the Island's central plateau could be made economically productive. Following the 1939–45 War, large tracts of land were acquired for settlement by ex–servicemen under the War Service Land Settlement Scheme.

The number of rural establishments on the Island more than doubled in the 30 year period 1946–1976. In the same period, the area of rural establishments increased from 163,201 hectares to 308,970 hectares, an increase of 89 per cent. Due to property amalgamations, there are now 330 full–time farmers on Kangaroo Island (compared with 453 in 1965–66. As well, over 100 hobby farmers who own up to 40 hectares, live on their property but work away from it.

Land Utilisation of Establishments, Kangaroo Island

	Establishments		*Area under crop (a)*	*Crops and pastures fertilised*		
Year	*Number*	*Area*		*Area fertilised*	*Fertiliser used*	*Fertiliser used per hectare*
		ha	*ha*	*ha*	*tonnes*	*kg*
1987–88	323	263,686	11,524	158,073	21,864	138.32
1988–89	326	264,392	12,516	163,853	24,040	146.72
1989–90	326	258,415	11,275	153,374	20,900	136.27
1990–91	330	257,884	10,433	99,006	11,483	115.98
1991–92	328	266,305	11,122	78,673	7,329	93.16

(a) Excludes pasture harvested for hay and seed.

Livestock

Sheep on Kangaroo Island have been bred mainly for wool although there has been some change to prime lamb production. The number of sheep carried rose from 87,000 in 1946 to a record 1,236,030 in 1990. At 31 March 1992 there were 1,141,731 sheep, 7.1 per cent of the total State. Most of this increase occurred on the main plateau where the War Service Land Settlement Scheme has been developed. Sheep numbers have generally stabilised on the Island although numbers have fluctuated with seasonal conditions.

Sheep and Lambs Shorn, Wool Clip and Average Weight per Fleece
Kangaroo Island

Particulars	*Unit*	*1990*	*1991*	*1992*
Sheep and lambs shorn	No.	1,410,392	1,398,380	1,296,812
Wool clip	kg	6,952,815	6,278,993	6,086,227
Average fleece weight	kg	4.93	4.49	4.69

Sheep milk production on Kangaroo Island is used mainly in the manufacture of sheep milk yoghurt and speciality cheeses. It is the only sheep dairy in South Australia.

Numbers of cattle associated with meat production peaked in the mid–1970s at 57,000 head. By 31 March 1992 the number had fallen to 9,615.

Cattle for milk production are raised only for local milk supply and numbered 191 in 1992. The number of cattle for milk production has steadily declined over the last thirty years. Pig numbers also have declined over this period.

Livestock Numbers, Kangaroo Island

Year	Cattle for		Sheep and lambs	Pigs
	Meat	Milk		
1988	10,158	144	1,133,168	168
1989	8,638	146	1,196,846	140
1990	7,372	157	1,236,030	83
1991	8,864	139	1,157,026	80
1992	9,615	191	1,141,731	163

Crops

Cereals are grown on the Island, but the area sown is minor in relation to the State total. Cereals are grown mainly on the mixed crop–livestock farms of the Nepean Plain and Dudley Peninsula.

Oats are grown for fodder in rotation with pastures. The area sown to oats for grain in 1991–92 was 5,951 hectares and the production of oats was 11,532 tonnes, an average yield of 1.94 tonnes per hectare. The principal varieties of oats sown were Echidna and Mortlock. Oats for hay were grown on 1,878 hectares.

Prize winning malt barley has been grown in the Nepean Plain and Dudley Peninsula areas and the production of barley was 2,626 tonnes in 1991–92. The principal variety of barley sown was Schooner.

Wheat growing is of little importance on the Island and in 1991–92 only 82 hectares were sown to wheat.

Triticale has increased in importance over recent years with 712 hectares producing 1,354 tonnes in 1991–92. Legumes were grown on 528 hectares with lupins being the main crop producing 495 tonnes from 427 hectares. Rapeseed produced 243 tonnes from 168 hectares.

The gross value of agriculture for Kangaroo Island in 1991–92 was $32.4 million. Wool (including wool–on-skins) was valued at $20.9 million, sheep and lambs slaughtered or otherwise disposed of $4.8 million and crops $4.8 million. The main cereal crop was oats, valued at $1.2 million for grain and $1 million for hay. Pasture hay gross value was $1.6 million.

Landcare

Ten Landcare groups have been formed which cover approximately 75 per cent of farm land. The first Kangaroo Island District Soil Conservation Board was gazetted in July 1989 and a draft District Plan has been released for public comment.

The key areas of land degradation being tackled are salinity, waterlogging, acidity and native vegetation decline. Groups have been identifying and monitoring areas at risk and promoting appropriate land use management with trials and demonstration plots. Instruction in property planning and design/surveying of graded banks has been given. Landcare works closely with the three schools on the Island and other groups, such as the Agricultural Bureau.

Mining

Since the cessation of gypsum mining operations and the depletion of stockpiles at Ballast Head, there are no significant mining operations on Kangaroo Island. However, the Island is still considered attractive for base metal exploration, with exploration programs in 1993 concentrating on the search for lead and zinc.

Some of the sands in the coastal area near Redbanks (south–east of Kingscote) contain minor quantities of rutile, zircon and ilmonite. These deposits are of low grade and are insignificant compared with those currently being worked in the eastern States.

Small occurrences of gold (the Kobinoor Mine) and silver–lead (Western River area) have been explored without success. Some alluvial gold and small gemstones have been found at Dawes Diggings (south of Parndana) and amateur fossickers are still interested in this area.

Before the first settlement, salt was taken from the surface of the salt lakes for use by whalers who visited the Island and in 1919 the white clay deposits near Hog Bay were tested to determine their usefulness as china clay, but there has been no reported production of either salt or clay for the past 50 years.

Sufficient rock and sand is mined on Kangaroo Island to fully meet the Island's requirements for construction material.

Forestry

Few of the native forest species growing on Kangaroo Island have been of any commercial value or been available in sufficient quantities to support a stable timber processing industry.

In recent years *Pinus radiata* plantations have been established and the roundwood used for fence posts and related products.

Fisheries

Commercial fishing around Kangaroo Island is undertaken for all major species. The most important species taken are rock lobster, whiting, shark and garfish. The following tables show the size and composition of the commercial fish catch landed on Kangaroo Island since 1989–90. Prawn and abalone fishery figures cannot be separately extracted by Port of landing.

The tables do not include aquaculture and miscellaneous production.

Fishing: Production by Species, Kangaroo Island
Estimated Landed Weight
('000 kg)

Species	*1989–90*	*1990–91*	*1991–92*
Rock lobster	244	239	326
Shark	11	25	39
Whiting	47	43	57
Tommy ruff	5	3	8
Snapper	3	3	3
Garfish	19	29	30
Australian salmon	3	10	16
Pike	2	1	2
Other	30	23	38
Total	*364*	*376*	*519*

Source: Based on fisherman's catch returns collected by the Department of Agriculture and Fisheries.

In 1991–92 the value of the catch landed on Kangaroo Island totalled $6.5 million.

Fishing: Value by Species, Kangaroo Island
($'000)

Species	*1989–90*	*1990–91*	*1991–92*
Rock lobster	3,380	3,966	5,721
Shark	17	58	100
Whiting	303	259	417
Tommy ruff	4	2	6
Snapper	10	12	12
Garfish	64	79	105
Australian salmon	5	10	14
Pike	4	2	3
Other	56	48	85
Total	*3,843*	*4,436*	*6,463*

Source: Based on fisherman's catch returns collected by the Department of Agriculture and Fisheries.

Much of the fish landed on Kangaroo Island is transported to the mainland for further processing and/or distribution to the retail market either through the Adelaide Fish Market or direct to wholesalers. On the Island itself, there is one fish factory located at Kingscote and operated by South Australian Fishermen's Cooperative Limited (SAFCOL). In addition there are two fish buyers located at American River.

Although there are four ports of landing on Kangaroo Island, Kingscote is by far the most important with, on average, over 80 per cent of the catch being landed there. American River, Vivonne Bay and Penneshaw are other ports at which fish are landed.

Fish farming

Kangaroo Island has 87 registered fish farmers. Marron production is one of the growing industries. In the 1992–93 season, 1.8 tonnes of Marron was sold on the domestic market. Trial shipments to Korea and Japan indicate a potential market of 0.5 to 1.0 tonnes per week.

There is little manufacturing industry on Kangaroo Island. At 30 June 1991 there were seven manufacturing locations on the Island which employed 145 persons. During 1990–91 the manufacturing locations paid $1.3 million in wages and salaries and had a turnover of $5.8 million.

Retail establishments

Much of the retail trade on Kangaroo Island is orientated towards the tourist industry. Retailers provide a reasonable range of consumer goods but the more expensive and specialised durable goods such as furniture, are purchased in Adelaide.

At 30 June 1986, there were 55 retail establishments on Kangaroo Island. In 1985–86 these establishments had a turnover of $16.1 million, had a total floor space of 6,100 square metres and were trading for an average of 51 hours per week. Of the total retail establishments there were 23 food stores and 13 motor vehicle dealers, petrol and tyre retailers.

Transport

Roads

The construction of roads on Kangaroo Island has been directly related to agricultural development. In the early years of settlement, rough roads were formed at the eastern end of the Island and by 1908 these totalled approximately 220 kilometres in length. However, on the main plateau to the west there were virtually no tracks apart from the one which followed the telegraph line between Kingscote and Cape Borda.

By 1945 there were approximately 580 kilometres of formed roads on the Island but few of these, other than the Cape Borda and South Coast roads, were on the western part of the Island. After 1947, a large scale road construction program was undertaken in conjunction with the War Service Land Settlement Scheme.

In recent years, the growing significance of Kangaroo Island as a tourist destination has resulted in the construction and improvement of roads used for tourism on the Island.

The responsibility for the construction and maintenance of roads on Kangaroo Island is shared between the Department of Road Transport and the District Councils of Kingscote and Dudley. The Department of Road Transport is responsible for the declared State arterial roads linking the four principal towns on the Island. These roads have been sealed by the Department using the District Councils as contractors to undertake the work.

The District Councils are responsible for the local roads on the Island, some of which have also been sealed in recent years *e.g.* the sealing of the Playford Highway westwards from Parndana to the junction of West End Highway, the sealing of Emu Bay Road, and the continuing extension of the sealed surface along the Birchmore Road towards the South Coast Road.

Over the period June 1972 to June 1993, all the above activities have resulted in an increase in total road length of 559 kilometres, and an increase in sealed road length of 133 kilometres.

The following table shows the length of roads classified by type of surface at June 1993.

Length of Roads: Type of Surface, Kangaroo Island at 30 June 1993
(Kilometres)

Particulars	Natural surface	Formed only	Paved		Total
			Unsealed	Sealed	
Arterial roads:					
Dudley (DC)	–	–	–	40	40
Kingscote (DC)	–	–	–	63	63
Local roads:					
Dudley (DC)	11	52	176	11	250
Kingscote (DC)	–	58	922	101	1,081
Total	***11***	***110***	***1,098***	***215***	***1,434***

Motor vehicles on register

At 30 June 1993 there were 1,893 passenger vehicles, 1,109 commercial vehicles and 134 motor cycles registered on Kangaroo Island.

Kangaroo Island ferry services

The Kangaroo Island community is serviced by sea and air. Sea services are provided by Kangaroo Island Sealink and Eastern Cove Traders operating between Cape Jervis and the Penneshaw area, and a Government sponsored service operating between Port Adelaide and Kingscote. Kangaroo Island Sealink operates two significant vessels, the *Philanderer III*, and the *Island Navigator*. Eastern Cove Traders operates a small passenger vessel, the *Valerie Jane*. The Government subsidised service is the *Island Seaway* which is privately owned and operated.

Both major services transport cargo, passengers and their vehicles but most sea passengers now travel with Kangaroo Island Sealink which takes about 1 hour. Much of the heavy cargo still travels on the *Island Seaway* although the *Island Navigator* has made inroads into this trade since its introduction late in 1990.

Air

Kangaroo Island has four airports, located at Kingscote, American River, Parndana and Penneshaw. Four regional operators, Air Kangaroo Island, Albatross Air Charter, Kendall Airlines and Emu Airways operate regular services between Kingscote and Adelaide, the 125–kilometre flight taking approximately half an hour. Air Kangaroo Island also operates regular services between the Island's four airports. Details of passenger and aircraft movements on scheduled services at Kangaroo Islands airports are shown in the following table.

Passengers, Freight and Aircraft Movements, Kangaroo Island

Particulars	1989–90	1990–91	1991–92
Passengers *(a)*:			
American River	3,175	3,632	3,052
Kingscote	27,943	37,213	40,753
Parndana	4,430	3,693	4,320
Penneshaw	2,788	2,540	2,399
Aircraft movements *(b)*:			
American River	3,382	3,618	4,982
Kingscote	3,388	4,415	9,006
Parndana	1,636	1,816	3,746
Penneshaw	2,804	2,916	3,513

(a) Total of embarkations and disembarkations. *(b)* Total of arrivals and departures.

Communications

There is one corporate post office at Kingscote and three post office agencies at Parndana, American River and Penneshaw.

Apart from public holidays, mails are received into and leave the Island at least once daily, five days a week. A private mail–bag system operated for persons in outlying areas.

Media

In addition to State–wide newspapers, Kangaroo Island has its own newspaper *The Islander* which is published every Thursday and has a circulation of about 1,300. This newspaper was first published in 1967. From 1907 to 1968 the Island's newspaper was the *Kangaroo Island Courier*.

There are no national or commercial radio or television stations on the Island.

Tourism

Kangaroo Island is one of South Australia's most acclaimed tourist attractions – a haven for magnificent fauna and flora, some of which are now extinct on mainland Australia. The Island's pristine beauty is widely recognised and it is a tourist destination for many national and international visitors.

The 480–kilometre coastline of Kangaroo Island is of exceptional landscape and recreational value offering rugged sheer cliffs and rocky headlands interspersed with long and sandy beaches and small sheltered inlets and coves. Impressive naturally sculptured rock formations along the coast are of great interest.

Visitors are attracted to Kangaroo Island by its natural unspoilt beauty and abundance of flora and fauna. The National Parks and Wildlife reserves, which cover a quarter of the Island, are of particular appeal and include Flinders Chase National Park and Kelly Hill, Seal Bay and Cape Gantheaume Conservation Parks.

Seal Bay, and the opportunity to get close to seals in their natural environment, is a major attraction for many visitors, attracting an estimated 71,000 visitors in 1991–92. Recreational fishing and bushwalking are popular recreational activities among visitors.

Around a third of overnight visitors to Kangaroo Island are from overseas or interstate. Among overseas visitors, a particular appeal of Kangaroo Island is the opportunity it offers to experience Australia's unique flora and fauna in a natural setting and the natural and rural landscapes of the Island.

A comprehensive range of accommodation is available to visitors wishing to stay on the Island to enjoy the relaxed lifestyle. Mainland services including television and radio stations are received on the Island and several times a year the Island has its own FM radio transmission. All State newspapers are delivered on a daily basis. Banking facilities including EFTPOS are available after hours.

On Kangaroo Island at 31 December 1992 there were two licensed hotels, four licensed motels, five unlicensed motels and seven other letting entities providing accommodation for visitors, with a total of 285 rooms or units. There were also two visitor hostels, four caravan parks and a number of public camping grounds. Takings from accommodation during 1992 were $2,468,000.

Appendix

STATISTICAL SUMMARY

In the next twenty–one pages, a historical summary of some of the more important statistics relating to South Australia is shown. This is intended to present a general picture of the development of the State. Naturally the range of statistics available for the early years of the colony is very limited, and in addition it is not always possible to achieve perfect comparability in presenting details covering a period in excess of 150 years. Generally, all series on each page relate to either financial or calendar years but some financial year series have been included on pages which contain information shown in calendar years.

The first year shown on each page is the earliest for which any series on that page is available. Blanks at the top of some columns indicate that information relating to these particular series either was not collected or is not available for these early years, or is not available on a basis comparable to more recent statistics.

All major breaks in series are covered by footnotes, but minor changes are not so recorded, and the statistics should be interpreted with this in mind. An example can be quoted from the table on deaths from principal causes where comparability is affected somewhat by changes in classification, particularly in 1950, but no footnote to this effect has been included.

The following standard symbols have been used throughout the summary:

n.a.	not collected
n.y.a.	not yet available
p	preliminary figure or series subject to revision
..	not applicable
–	nil or less than half the final digit shown
——	break in continuity of figures

POPULATION AND DEMOGRAPHY[a]

Year	Population estimate at 31 December			Annual population growth			
	Males	Females	Persons	Recorded natural increase (b)	Rate of natural increase (c)	Total increase	Rate of population growth
							per cent
1836	309	237	546			546	
1841	8,755	6,730	15,485			855	5.84
1846	14,711	11,182	25,893	577	22.29	3,433	15.29
1851	37,321	29,217	66,538	1,786	26.85	2,838	4.46
1856	56,264	51,622	107,886	3,341	30.97	10,499	10.78
1861	67,409	63,403	130,812	3,589	28.00	5,230	4.17
1866	88,024	80,883	168,907	4,029	24.39	7,430	4.60
1871	97,019	91,625	188,644	4,704	25.21	4,098	2.22
1876	116,894	107,666	224,560	4,674	21.51	14,484	6.89
1881	152,453	133,518	285,971	6,696	23.81	9,578	3.47
1886	160,814	145,896	306,710	6,943	22.54	–2,603	–0.84
1891	168,826	155,895	324,721	6,526	20.23	5,774	1.81
1896	179,024	173,043	352,067	5,974	16.95	99	0.03
1901	(d)180,440	(d)178,890	(d)359,330	(d)5,105	14.29	(d)2,080	0.58
1906	184,803	181,710	366,513	5,049	13.90	3,892	1.07
1911	214,061	205,331	419,392	7,019	17.05	12,530	3.08
1916 (e)	212,585	229,253	441,838	6,780	15.35	–4,147	–0.93
1921	251,170	250,572	501,742	6,992	14.07	10,736	2.19
1926	285,013	275,912	560,925	6,606	11.92	13,877	2.54
1931	289,397	287,682	577,079	4,191	7.28	2,612	0.45
1941 (e)	301,645	304,721	606,366	4,677	7.78	7,310	1.22
1946 (e)	317,238	323,180	640,418	9,352	14.72	9,536	1.51
1951	375,188	368,597	743,785	10,279	14.03	20,942	2.90
1956	436,807	425,145	861,952	11,371	13.40	27,291	3.27
1961	494,600	484,800	979,400	14,584	15.03	22,400	2.68
1966	554,000	549,800	1,103,700	11,017	10.07	20,700	1.92
1971	602,000	606,700	1,208,700	..	..	..	..
1972	608,800	613,400	1,222,100	12,020	9.89	13,400	1.10
1973	615,700	619,900	1,235,600	10,474	8.53	13,400	1.09
1974	627,700	632,000	1,259,800	9,906	7.97	(f)24,200	1.95
1975	633,200	637,500	1,270,700	9,958	7.87	10,900	0.86
1976	637,800	642,300	1,280,200	8,902	6.98	9,500	0.75
1977	643,200	649,100	1,292,300	9,406	7.31	12,100	0.94
1978	645,400	653,200	1,298,600	8,781	6.78	6,300	0.49
1979	648,200	656,400	1,304,600	8,753	6.73	6,000	0.46
1980	651,600	661,100	1,312,600	8,861	6.77	8,000	0.61
1981	657,000	668,200	1,325,200	9,550	7.24	12,600	0.96
1982	663,600	674,100	1,337,800	8,751	6.57	12,600	0.95
1983	671,700	681,500	1,353,200	9,961	7.40	15,400	1.15
1984	678,000	687,400	1,365,300	9,952	7.32	12,100	0.89
1985	684,400	692,400	1,376,800	9,295	6.78	11,500	0.84
1986	689,800	697,300	1,387,100	9,413	6.81	10,300	0.75
1987	695,000	704,000	1,399,000	8,704	6.25	11,900	0.86
1988	701,200	711,200	1,412,300	8,465	5.88	13,300	0.95
1989	707,400	718,000	1,425,500	8,262	5.82	13,200	0.93
1990	713,900	725,000	1,438,900	8,955	6.25	13,400	0.94
1991	720,400	731,200	1,451,600	8,464	5.85	12,700	0.88
1992	724,200	734,800	1,459,000	8,386	5.76	7,400	0.51

(a) Figures before January 1962 exclude full-blood Aborigines. Figures from 1971 are compiled on the basis of estimated resident population. *(b)* Births and deaths of full-blood Aborigines, where identified in registration, have been excluded from natural increase figures before 1 January 1962. *(c)* Excess of births over deaths per 1,000 of mean population. From 1971 mean estimated resident population. *(d)* Includes Northern Territory before 1901. *(e)* During the 1914–18 War, defence personnel leaving the State were treated as departures, but during the 1939–45 War they were retained in the population, and troops of other States and countries were excluded. *(f)* Effect of Cyclone Tracy.

BIRTHS AND SOCIAL

Year	Live births			Adoptions (b)	Marriages		Divorces (c)	
	Number	Rate (a)	Ex-nuptial (%)	Number	Total	Rate (a)	Total	Rate (a)
1846	937	36.2			220	8.5		
1851	2,759	41.5			189	2.8		
1856	4,488	41.6		57	1,171	10.9		
1861	5,551	43.3		49	1,158	9.0		
1866	6,782	41.1		43	1,299	7.9		
1871	7,082	38.0		67	1,250	6.7		
1876	8,224	37.8		93	1,852	8.5		
1881	10,708	38.1	2.3	84	2,308	8.2		
1886	11,177	36.3	2.4	82	1,976	6.4	10	0.0
1891	10,737	33.4	2.9	63	2,315	7.2	5	0.0
1896	10,012	28.4	3.5	76	2,183	6.2	6	0.0
1901	9,079	25.4	4.0	67	2,304	6.5	6	0.0
1906	8,921	24.6	4.0	85	2,679	7.4	3	0.0
1911	11,057	28.9	4.2	60	4,036	9.8	20	0.0
1916	11,857	26.9	3.8	104	3,602	8.2	14	0.0
1921	11,974	24.1	3.1	111	4,383	8.8	88	0.2
1926	11,483	20.7	3.1	216	4,503	8.1	71	0.1
1931	9,079	15.8	3.3	241	3,069	5.3	138	0.2
1936	8,911	15.2	3.1	297	5,182	8.8	213	0.4
1941	10,965	18.2	2.8	319	6,855	11.4	273	0.5
1946	15,813	24.9	3.2	371	6,700	10.6	654	1.0
1951	17,463	23.8	2.9	399	6,646	9.1	637	0.9
1956	18,964	22.4	3.4	402	6,277	7.4	567	0.7
1961	22,399	23.1	4.6	594	6,804	7.0	718	0.7
1962	21,361	21.7	4.8	591	7,021	7.1	685	0.7
1963	21,367	21.2	5.0	644	7,302	7.2	765	0.8
1964	20,866	20.2	5.9	619	7,765	7.5	887	0.9
1965	20,891	19.6	6.3	717	8,680	8.2	852	0.8
1966(d)	20,362	18.6	6.8	783	9,051	8.3	1,069	1.0
1967	20,386	18.4	6.7	839	9,434	8.5	929	0.8
1968	21,207	18.9	7.4	780	9,652	8.6	915	0.8
1969	21,977	19.3	6.9	797	10,599	9.3	963	0.8
1970	22,617	19.5	7.6	834	10,864	9.4	939	0.8
1971	22,996	19.4	7.8	879	10,833	9.2	1,264	1.1
1972	21,844	18.2	8.3	776	10,829	9.1	1,235	1.0
1973	20,407	16.8	8.8	649	10,806	9.0	1,582	1.3
1974	20,181	16.3	9.3	558	10,769	8.8	1,561	1.3
1975	19,986	16.0	9.7	551	9,843	8.0	1,812	1.4
1976	18,947	14.9	9.4	549	10,902	8.6	(f)6,142	4.8
1977	19,260	15.0	9.8	658	10,126	7.9	4,419	3.4
1978	18,558	14.3	11.0	506	9,800	7.6	3,805	2.9
1979	18,478	14.2	11.4	415	9,778	7.6	3,794	2.9
1980	18,499	14.1	12.5	475	10,064	7.8	4,203	3.2
1981	19,351	14.7	13.0	505	10,252	7.8	4,132	3.1
1982	19,294	14.5	13.1	396	10,935	8.2	4,526	3.4
1983	(e)19,830	14.8	14.3	424	10,550	7.9	4,431	3.3
1984	20,052	14.8	14.5	438	10,643	7.9	4,114	3.0
1985	19,790	14.5	14.6	222	10,148	7.4	4,216	3.1
1986	19,741	14.4	17.5	347	9,878	7.2	3,776	2.8
1987	19,235	13.8	17.8	346	9,695	7.0	4,050	2.9
1988	19,155	13.6	18.8	244	10,128	7.2	4,031	2.9
1989	19,610	13.8	21.0	229	9,776	6.9	3,740	2.6
1990	19,863	13.9	22.8	147	9,609	6.7	4,066	2.8
1991	19,640	13.6	24.3	108	9,392	6.5	4.215	2.9
1992	19,311	13.3	25.1	116	n.y.a.	n.y.a.	n.y.a.	n.y.a.

(a) Rate per 1,000 of mean population. From 1976 mean resident population. *(b)* Year ended 30 June. *(c)* Dissolutions made absolute. *(d)* Vital events of full-blood Aborigines, where identified in registrations, were excluded before 1966. *(e)* From 1983 State of usual residence not State of registration. *(f)* The *Family Law Act 1975* (Cwlth) came into operation throughout Australia in 1976.

DEATHS

Year	Number	Rate (a)	Rates from principal causes (a)		Infant (b)	
			Diseases of the heart	Cancer	Number	Rate (c)
1841						
1846	360	14.0				
1851	973	14.6			539	195.4
1856	1,147	10.6		0.1	610	135.9
1861	1,962	15.3		0.1	1,064	191.7
1866	2,753	16.7		0.2	1,385	204.2
1871	2,378	12.7		0.2	851	120.2
1876	3,550	16.3		0.4	1,228	149.3
1881	4,012	14.3		0.3	1,364	127.4
1886	4,234	13.8		0.3	1,409	126.1
1891	4,211	13.1		0.5	976	90.8
1896	4,038	11.5		0.5	1,015	101.0
1901	3,974	11.1		0.6	909	100.1
1906	3,872	10.7		0.8	675	75.7
1911	4,038	9.8	1.0	0.7	670	60.6
1916	5,077	11.5	1.3	0.8	868	73.2
1921	4,982	10.0	1.1	0.9	784	65.5
1926	4,877	8.8	1.0	1.0	509	44.3
1931	4,888	8.5	1.4	1.2	330	36.4
1936	5,464	9.3	1.9	1.3	277	31.1
1941	6,288	10.5	2.6	1.3	356	32.5
1946	6,461	10.2	3.0	1.3	428	27.1
1951	7,184	9.8	3.2	1.2	428	24.5
1956	7,593	9.0	3.2	1.2	377	19.9
1961	7,815	8.1	2.9	1.3	448	20.0
1962	8,232	8.4	3.1	1.4	409	19.2
1963	8,201	8.1	3.0	1.3	399	18.7
1964	8,906	8.6	3.2	1.3	397	19.0
1965	8,788	8.3	3.1	1.3	385	18.4
1966(d)	9,345	8.5	3.2	1.3	364	17.9
1967	9,071	8.2	3.1	1.4	346	17.0
1968	9,916	8.8	3.3	1.4	345	16.3
1969	9,337	8.2	3.0	1.5	347	15.8
1970	10,138	8.8	3.2	1.4	367	16.2
1971	9,686	8.2	2.9	1.4	366	15.9
1972	9,764	8.1	2.9	1.5	367	16.8
1973	9,835	8.1	3.0	1.5	276	13.5
1974	10,236	8.3	3.0	1.5	312	15.5
1975	9,947	7.9	2.9	1.5	222	11.1
1976	9,999	7.8	2.9	1.5	276	14.6
1977	9,784	7.6	2.8	1.5	221	11.5
1978	9,763	7.5	2.8	1.5	227	12.2
1979	9,661	7.4	2.8	1.5	166	9.0
1980	9,580	7.3	2.6	1.6	187	10.1
1981	9,706	7.4	2.6	1.7	157	8.1
1982	10,457	7.9	2.8	1.7	221	11.5
1983(e)	9,869	7.3	2.6	1.7	183	9.2
1984	10,099	7.4	2.6	1.8	152	7.6
1985	10,496	7.7	2.7	1.8	188	9.5
1986	10,328	7.5	2.7	1.8	146	7.4
1987	10,531	7.6	2.7	1.8	165	8.6
1988	10,690	7.6	2.7	1.9	152	7.9
1989	11,348	8.0	2.7	1.9	146	7.4
1990	10,938	7.6	2.5	2.0	168	8.5
1991	11,176	7.7	2.5	2.0	109	5.5
1992	10,925	7.5	2.5	1.9	117	6.1

(a) Rate per 1,000 of mean population. From 1976 mean resident population. *(b)* Under one year of age from 1871, previously under two years of age. *(c)* Rate per 1,000 live births registered. *(d)* Vital events of full-blood Aborigines, where identified in registrations, were excluded before 1966. *(e)* From 1983 State of usual residence not State of registration.

EDUCATION

	Primary and secondary						Tertiary students		
	Government schools (a)			Non-government schools					
		Students			Students				
Year	No.	Primary	Secondary	No.	Primary	Secondary	Universities (b)	Colleges of Advanced Education	Technical and Further Education
1851	115	3,031							
1856	147	6,516							
1861	219	10,711		236					
1866	292	14,690		n.a.					
1871	307	15,791		n.a.					
1876	281	25,889		326			58		
1881	405	36,888		363			74		
1886	504	44,405		n.a.			197		
1891	552	47,094		285			246		
1896	639	59,944		232			320		
1901	706	63,183		230			591		
1906	708	57,270		215	(c)9,753		626		
1911	743	53,494	1,800	179	(c)11,121		641		
1916	857	63,935	3,047	(d)218	(d)12,785		491		
1921	973	77,111	3,067	171	13,951		1,338		
1926	1,019	79,204	6,527	188	16,139		1,575		
1931	1,075	81,218	10,503	186	14,310		2,092		
1936	1,100	75,411	9,280	174	13,993		2,025		
1941	1,006	63,303	10,761	167	13,915		2,211		
1946	811	61,242	11,870	145	16,310		3,723		
1951	728	81,642	14,106	146	20,677		3,720		
1956	699	118,365	22,134	163	29,050		3,828		
1961	688	135,274	41,889	165	35,652		6,250		
1966	700	154,253	60,834	172	(e)24,188	(e)12,999	9,364		
1967	674	157,424	65,630	173	23,533	13,469	9,658		
1968	683	157,997	58,814	171	22,814	13,599	9,803		
1969	676	159,682	71,599	171	22,257	14,203	10,128	3,420	
1970	681	156,922	71,866	170	22,464	14,642	10,176	3,443	
1971	662	156,458	74,982	169	22,669	15,018	10,682	4,242	
1972	(f)615	154,886	77,926	163	22,232	15,233	11,124	(g)4,291	78,540
1973	614	152,698	79,088	163	21,929	15,806	11,497	6,662	78,214
1974	613	152,901	79,578	157	22,399	16,494	12,264	12,163	88,154
1975	619	151,975	82,737	151	22,479	16,818	12,876	13,773	91,421
1976	625	151,499	82,115	147	22,177	17,122	13,493	14,560	124,305
1977	626	152,079	81,131	145	22,361	17,085	13,390	15,168	139,651
1978	628	149,964	80,491	151	22,353	17,088	12,904	15,996	137,837
1979	632	146,793	77,732	155	22,591	17,381	12,840	16,042	147,329
1980	638	142,290	76,392	159	23,347	17,769	12,677	16,976	149,437
1981	638	137,860	75,173	163	24,729	18,583	12,811	17,558	163,440
1982	(h)716	131,250	75,266	169	25,805	19,952	12,892	17,031	168,007
1983	714	127,334	78,183	173	27,183	21,087	13,242	17,158	177,913
1984	708	121,615	79,605	174	(i)27,427	21,957	13,584	18,277	169,430
1985	708	117,588	78,648	175	28,133	23,113	13,833	18,434	139,129
1986	711	115,388	75,686	178	28,729	24,059	13,971	19,742	140,892
1987	717	112,311	73,670	177	29,125	24,834	14,407	18,903	140,500
1988	715	112,349	71,108	178	29,912	25,333	15,142	20,178	(j)101,246
1989	708	117,266	67,259	183	31,127	25,236	16,069	21,836	102,526
1990	706	119,490	65,378	185	32,179	25,688	18,274	n.a.	101,016
1991	696	122,139	64,675	184	33,925	26,094	(k)43,291		94,304
1992	682	124,254	63,302	184	35,123	26,123	44,285		91,397

(a) Net enrolment to 1969, thereafter at census date (at or about 1 August, or 1 July). Includes Northern Territory before 1958. (b) Excludes students at Conservatorium of Music not also enrolled for degree or diploma subject. (c) On last school day. (d) Non-government schools compulsorily registered, previous years incomplete. From 1916 to 1961 net enrolment including Northern Territory. (e) From 1962 at census date. Excludes Northern Territory. (f) From 1972 includes only primary and secondary, before 1972 included technical institutions. (g) In approved courses at colleges of advanced education. (h) Government junior primary schools counted separate from 1982. (i) From 1984 includes a small number of special students. (j) Data are not comparable to previous years because of reduction of double counting of individuals. (k) Figures are an amalgamation of all campuses of the former SACAE with the University of Adelaide, Flinders University and the recently formed University of South Australia.

HEALTH

Year	Recognised hospitals: Number of hospitals	Recognised hospitals: Admissions	Mental hospitals admissions during year (a)	Medical practitioners registered
1846	1		10	22
1851	1	413	9	68
1856	1	559	69	101
1861	1	795	68	111
1866	1	1,257	88	85
1871	1	1,433	111	77
1876	1	2,282	149	94
1881	1	2,258	199	113
1886	1	2,022	207	152
1891	1	2,301	224	177
1896	1	2,633	195	279
1901	1	3,554	214	341
1906	9	4,476	231	242
1911	21	8,547	273	299
1916	27	12,453	302	326
1921	31	15,642	272	360
1926	45	22,438	249	445
1931	51	26,505	250	457
1936	52	34,014	272	477
1941	55	40,593	247	814
1946	(b)58	(b)46,696	(b)302	947
1951	60	57,401	452	1,172
1956	65	69,295	553	1,395
1961	66	87,386	1,846	1,739
1962	65	89,409	1,925	1,821
1963	65	94,144	2,604	1,883
1964	65	99,491	3,132	2,002
1965	65	105,098	3,061	2,080
1966	67	111,313	2,810	2,175
1967	65	117,693	2,866	2,282
1968	65	122,835	2,733	2,372
1969	65	132,864	2,964	2,474
1970	66	135,433	3,378	2,568
1971	67	135,927	3,527	2,707
1972	68	147,058	3,602	3,054
1973	69	158,261	3,225	3,154
1974	70	164,797	3,309	3,348
1975	71	168,832	3,410	3,767
1976	73	179,733	3,665	4,531
1977	81	190,806	3,489	4,574
1978	81	202,802	3,648	4,783
1979	81	216,315	3,971	4,800
1980	81	220,138	4,470	5,100
1981	81	228,593	6,279	5,500
1982	81	222,319	6,790	4,778
1983	81	237,625	5,867	4,991
1984	81	249,572	6,084	5,200
1985	81	241,123	7,026	5,247
1986	81	242,709	7,700	5,271
1987	81	246,004	6,210	5,318
1988	81	251,148	5,456	5,331
1989	81	257,665	4,530	5,475
1990	81	265,932	4,634	5,651
1991	81	270,946	4,447	5,693
1992	81	270,891	4,301	5,676
1993	81	n.y.a.	n.y.a.	5,263

(a) From 1959–60 covers all in-patients (certified and voluntary) in institutions. Before this covered only certified patients in two 'long-term' institutions. (b) Year ended 30 June from 1946.

LAW AND ORDER : SOCIAL WELFARE

Year	Courts: Matters proven (a): Higher courts (b)	Courts: Matters proven (a): Lower courts (c)	Police personnel	Bankruptcies	Pensioners (d): Age and invalid	Pensioners (d): Disability and service
1841	37			36		
1846	40			16		
1851	103		127	106		
1856	85	2,919	174	88		
1861	62	3,025	151	115		
1866	107	4,341	208	252		
1871	91	4,864	187	247		
1876	129	7,905	257	200		
1881	213	13,231	371	696		
1886	121	6,808	401	535		
1891	85	6,918	388	142		
1896	110	5,149	347	240		
1901	98	4,968	359	165		
1906	92	5,249	373	172		
1911	74	7,303	423	190		
1916	52	7,145	541	324	10,993	794
1921	97	8,968	566	155	12,320	14,663
1926	174	21,417	633	439	14,098	16,144
1931	274	14,760	763	996	20,602	16,653
1936	171	14,920	701	551	26,134	15,997
1941	177	21,990	707	284	29,642	15,424
1946	231	(e)20,585	(e)830	23	29,512	30,687
1951	307	28,675	913	53	36,582	51,589
1956	362	28,221	1,018	150	47,754	66,535
1961	606	52,155	1,376	561	60,483	72,695
1966	738	71,694	1,595	648	67,999	68,439
1971	(f)931	110,543	1,971	(g)626	88,936	60,406
1972	964	123,063	2,063	643	92,771	58,682
1973	982	(h)94,068	2,167	554	104,350	59,707
1974	906	93,037	2,264	373	116,117	59,522
1975	989	104,402	2,461	437	123,627	(i)59,130
1976	1,080	95,758	2,548	351	130,229	59,536
1977	1,075	105,224	2,718	456	136,473	60,492
1978	1,258	105,413	2,879	673	141,941	61,642
1979	1,281	88,404	3,093	847	146,860	62,505
1980	n.a.	n.a.	(j)3,423	1,016	159,599	65,109
1981	n.a.	n.a.	3,427	1,012	153,210	67,696
1982	1,321	(k)15,384	3,400	860	155,924	69,924
1983	1,935	(l)31,102	3,357	962	160,694	73,812
1984	2,213	32,526	3,361	817	(m)171,418	76,686
1985	2,923	29,455	3,373	706	172,064	77,967
1986	2,549	31,918	3,492	922	174,057	78,401
1987	3,096	30,235	3,661	1,353	175,795	74,944
1988	2,639	n.a.	3,573	1,414	180,973	74,342
1989	3,976	n.a.	3,565	1,326	183,330	72,393
1990	n.a.	n.a.	3,650	1,322	185,048	71,158
1991	n.a.	n.a.	3,756	1,653	190,008	67,016
1992	n.a.	n.a.	3,774	2,031	(n)199,104	68,356

(a) Each type of offence counted separately when there are multiple charges against an individual. (b) Distinct persons only. From 1982 includes corporate bodies. (c) Year ended 30 June from 1943 to 1983. (d) Year ended 30 June. (e) Year ended 30 June from 1943. (f) Year ended 30 June from 1971 to 1979. (g) Year ended 30 June from 1971. (h) Excludes juvenile offenders from 1973. (i) From 1974–75, war pensions known as disability pensions. (j) From 1980 includes trainees, cadets and probationary constables. (k) Excludes offences relating to the Road Traffic Act. (l) From 1983 excludes minor traffic offences. (m) Includes carer pensions from 1984. (n) From 1992 includes those persons receiving the Disability Support pension, which replaced the invalid pension and sheltered employment allowance.

EMPLOYMENT AND UNEMPLOYMENT

Year	Civilian labour force (a)		Civilian employment (a)		Factory employment (b)		Unemployed (a)		
							Number		Rate (c)
	Males	Females	Males	Females	Males	Females	Males	Females	Persons
	'000	'000	'000	'000	'000	'000	'000	'000	per cent
1911					22.6	5.3			
1916–17					20.8	5.2			
1920–21					24.5	5.9			
1925–26					33.1	6.9			
1930–31					19.3	4.6			
1935–36					31.4	7.1			
1940–41					40.1	10.8			
1945–46					49.5	13.7			
1950–51					66.8	16.2			
1951–52					68.0	15.9			
1952–53					67.1	13.4			
1953–54					70.7	14.8			
1954–55					73.7	15.9			
1955–56					76.1	16.4			
1956–57					75.5	16.4			
1957–58					75.9	16.6			
1958–59					77.4	16.7			
1959–60					81.3	17.7			
1960–61					81.9	18.1			
1961–62					81.8	17.3			
1962–63					86.7	18.6			
1963–64					90.9	19.9			
1964–65					94.7	21.5			
1965–66					96.2	22.1			
1966–67	321.9	143.5	316.6	136.5	96.1	22.1	5.3	7.0	2.6
1967–68	319.8	144.5	315.0	138.1	98.9	22.5	4.9	6.4	2.4
1968–69	328.7	152.1	323.9	146.0	(d)93.3	(d)23.0	4.9	6.2	2.3
1969–70	332.7	161.2	329.3	155.8	95.4	24.4	3.4	5.4	1.8
1970–71	335.4	168.1	331.4	163.1	n.a.	n.a.	4.0	5.0	1.8
1971–72	343.2	170.1	338.0	162.1	96.3	25.4	5.1	7.9	2.5
1972–73	348.9	182.2	341.5	172.6	97.8	27.7	7.5	9.6	3.2
1973–74	358.3	196.5	352.9	188.0	100.6	30.8	5.3	8.4	2.5
1974–75	364.3	200.9	358.5	190.9	(e)91.8	(e)25.6	5.8	10.0	2.8
1975–76	366.5	211.3	355.0	194.3	91.0	26.1	11.5	17.0	4.9
1976–77	372.0	217.0	361.0	203.2	89.2	24.9	11.0	13.7	4.2
1977–78	(f)380.1	(f)223.0	(f)356.0	(f)206.5	82.9	22.9	(f)24.1	(f)16.5	(f)6.7
1978–79	376.1	224.0	352.2	203.2	82.8	23.7	23.9	20.8	7.4
1979–80	376.2	222.2	349.8	200.4	82.6	23.0	26.4	21.8	8.1
1980–81	375.7	229.7	350.7	210.3	80.9	23.1	25.0	19.5	7.3
1981–82	274.2	229.5	348.7	208.6	81.0	22.6	25.5	20.8	7.7
1982–83	382.1	224.5	338.9	199.7	70.5	19.9	43.1	24.8	11.2
1983–84	(g)384.5	(g)236.7	(g)349.9	(g)214.6	70.9	20.8	(g)34.6	(g)22.0	(g)9.1
1984–85	390.0	248.1	358.0	226.0	71.3	21.2	32.0	22.1	8.5
1985–86	(h)396.5	(h)260.7	(h)365.5	(h)241.2	n.a.	n.a.	(h)31.0	(h)19.5	(h)7.7
1986–87	396.2	269.3	362.9	245.9	67.7	22.5	33.2	23.5	8.5
1987–88	399.0	279.7	364.8	255.8	71.7	23.5	34.2	23.9	8.6
1988–89	410.7	287.1	382.2	266.3	77.3	25.8	28.5	20.8	7.1
1989–90	422.7	290.2	394.3	269.8	73.3	23.4	28.4	20.4	6.8
1990–91	420.6	301.0	379.3	276.5		94.3	41.2	24.5	9.1
1991–92	421.7	301.0	367.1	270.5	n.y.a.	n.y.a.	54.6	30.5	11.8

(a) From the June Labour Force Survey from 1978; August in earlier years. *(b)* Average employment (including working proprietors), over the year to 1967–68. From 1968–69 employment at 30 June. *(c)* The unemployment rate is the number unemployed as a proportion of the number in the labour force. *(d)* Direct comparisons with previous years are not possible because of changes in the scope of the census. *(e)* From 1974–75 excludes single establishment enterprises employing fewer than four persons. *(f)* Labour force before 1977–78 are based on 1976 Census benchmarks. From 1977–78 estimates are based on 1981 Census benchmarks. *(g)* From 1983–84, labour force based on 1986 Census benchmarks. *(h)* Estimates for periods before April 1986 are based on the old definition of employed persons.

WAGES

31 December	State living wage		Basic and minimum wage rates (a)		Minimum weekly wage rates (b)		Award rates of pay indexes (c)	
	Males	Females	Males	Females	Males	Females	Males	Females
	$	$	$	$	$	$		
1911			5.10					
1916	5.40		6.15		5.90	2.48		
1921	7.95	3.50	7.95		8.94	4.52		
1926	8.55	3.95	8.55		9.57	5.00		
1931	6.30	3.15	5.81		7.50	4.39		
1936	6.60	3.30	6.90		7.95	4.33		
1941	8.70	4.35	8.40		10.58	5.54		
1946	9.85	5.50	10.20		12.41	7.60		
1951	19.50	14.60	19.50	14.60	23.60	17.02		
1952	22.90	17.15	22.90	17.15	27.08	19.68		
1953	23.10	17.30	23.10	17.30	27.35	19.91		
1954	23.10	17.30	23.10	17.30	28.16	19.99		
1955	23.10	17.30	23.10	17.30	28.50	20.18		
1956	24.10	18.05	24.10	18.05	29.63	20.92		
1957	25.10	18.80	25.10	18.80	20.69	21.95		
1958	25.60	19.20	25.60	19.20	31.24	22.38		
1959	27.10	20.30	27.10	20.30	33.99	23.92		
1960	27.10	20.30	27.10	20.30	34.22	24.29		
1961	28.30	21.20	28.30	21.20	35.46	25.20		
1962	28.30	21.20	28.30	21.20	35.65	25.23		
1963	28.30	21.20	28.30	21.20	36.40	25.52		
1964	30.30	22.70	30.30	22.70	38.69	27.29		
1965	30.30	22.70	30.30	22.70	39.48	27.75		
1966	32.30	24.20	32.30	24.20	41.75	29.42		
1967	33.30	25.20	(a)37.05		43.79	31.32		
1968	34.65	26.55	38.40		48.23	33.60		
1969	(d)34.65	(d)26.55	41.90		50.76	35.94		
1970	(d)34.65	(d)26.55	41.90		52.12	37.51		
1971	37.85	29.00	45.90		59.38	44.16		
1972	39.85	31.00	50.60		65.82	50.50		
1973	43.15	34.10	59.60		75.20	62.11		
1974	46.50	37.30	67.60	(e)60.80	103.32	91.47		
1975	(f)	(f)	82.40		115.13	103.34		
1976			100.20		132.20	125.62	104.3	104.4
1977			111.80		145.69	139.06	115.1	114.8
1978			119.60		158.53	149.15	124.2	123.1
1979			123.40		167.12	154.58	131.1	128.0
1980			134.40		184.39	172.56	146.2	144.8
1981			144.40		215.25	192.63	167.1	160.5
1982			144.40		(g)229.10	(g)209.52	186.1	181.2
1983			150.60		(h)	(h)	195.8	191.6
1984			156.80				204.8	202.9
1985			168.50				(i)103.8	(i)103.8
1986			172.40				106.3	106.7
1987			182.40				111.5	111.9
1988			188.40				119.1	119.5
1989			204.10				127.3	127.4
1990			(j)				132.7	132.4
1991							139.1	140.5
1992							140.6	142.5

(a) Provisions for minimum wages (for adult males only) were inserted in Commonwealth Awards in July 1966 and basic wages were replaced by the total wage concept in July 1967. (b) Adult rates for all industries excluding rural. (c) Base: weighted average minimum award rate, June 1976 = 100.0. Includes wage and salary earners for all industries except rural, permanent defence forces and private households employing staff. (d) An economic loading of 3 per cent of the sum of the living wage plus margin was added to all award rates of pay from December 1969 to January 1971. (e) Between May 1974 and June 1975 the minimum wage for adult males was extended to adult females in three steps. (f) Increased to $48.20 and $38.60 for males and females respectively from May 1975 and abolished in September 1975, award rates thereafter being specified as total wages. (g) At 1 August. (h) Discontinued and replaced by award rates of pay indexes. (i) Base: June 1985 = 100.0. (j) Discontinued. Minimum wage rates are now determined for individual State Awards.

PRICES

Year	Retail price indexes: Adelaide						Agricultural produce at principal markets		
	'C' Series (a)			Consumer (b)					
	Food and groceries	Rent	All groups	Food	Housing	All groups	Wheat (per tonne) (c)	Barley (per tonne)	Wool (per kg)
							$	$	cents
1901	575								
1911	570						12.71	16.53	15.59
1921	941	819	989				29.39	19.49	24.74
1926	1,045	927	1,026				22.82	17.64	27.45
1931	789	755	837				8.41	9.92	12.52
1936	798	795	839				14.07	9.83	21.89
1941	905	893	988				16.42	21.43	21.76
1946	1,006	894	1,120				29.47	27.91	24.78
1951	1,931	949	1,833	48.2	42.5	54.6	53.76	51.54	237.28
1952	2,380	1,055	2,159	62.5	47.6	66.8	60.63	71.74	118.54
1953	2,444	1,155	2,246	68.7	55.9	73.1	61.77	71.12	137.74
1954	2,525	1,174	2,277	71.2	61.5	74.7	53.35	44.84	138.18
1955	2,657	1,247	2,354	72.9	63.2	75.6	49.05	59.97	120.66
1956	2,871	1,358	2,466	76.2	67.6	78.1	49.60	46.74	103.57
1957	2,710	1,468	2,463	78.9	72.3	81.2	53.28	48.50	135.63
1958	2,768	1,592	2,536	76.9	74.9	81.8	53.50	52.38	103.09
1959	2,998	1,674	2,647	80.7	76.7	83.6	51.51	49.43	83.84
1960				84.6	78.3	86.2	53.83	44.53	98.88
1961				90.9	83.2	89.8	55.37	40.39	88.49
1962				87.7	85.9	89.5	55.70	49.43	91.69
1963				86.6	86.7	89.1	53.94	48.94	98.92
1964				88.8	88.7	90.2	52.65	49.12	119.53
1965				93.9	92.1	93.9	51.88	50.84	97.31
1966				97.1	95.7	97.0	55.15	51.85	102.98
1967				100.0	100.0	100.0	54.67	52.56	99.69
1968				104.7	102.1	102.9	58.86	52.47	82.87
1969				106.4	104.7	105.3	50.01	41.09	91.76
1970				107.1	109.3	108.2	51.88	36.82	75.02
1971				109.5	115.9	112.5	52.98	49.21	59.74
1972				113.6	124.4	119.2	55.26	40.96	72.21
1973	Not calculated			123.1	133.3	126.5	56.09	59.30	178.07
1974				148.3	150.6	143.9	103.20	87.59	176.54
1975				163.7	185.3	169.7	111.21	106.11	120.12
1976				180.6	222.1	190.5	104.46	98.14	134.46
1977				(d)34.7	(d)34.3	(d)35.0	90.36	106.52	173.39
1978				38.7	37.2	38.5	102.20	88.37	179.03
1979				42.7	39.0	41.4	127.83	83.95	193.65
1980				48.1	41.8	45.5	153.24	126.84	224.56
1981				52.9	45.4	49.7	154.92	144.99	245.55
1982				57.6	50.0	54.9	159.61	139.47	262.85
1983				62.9	56.0	61.4	177.54	155.35	260.24
1984				67.3	61.8	65.8	164.86	153.95	281.10
1985				71.2	68.3	68.9	173.72	136.06	281.83
1986				77.0	73.4	74.6	170.63	122.58	304.92
1987				83.2	76.9	81.5	149.69	115.85	343.44
1988				87.6	79.4	87.0	169.07	123.36	493.03
1989				95.2	86.9	93.3	215.62	168.65	540.61
1990				100.0	100.0	100.0	199.39	167.63	469.60
1991				103.8	104.1	106.2	137.64	132.95	347.42
1992				106.0	100.4	108.9	203.58	144.81	308.58

(a) Base: average all groups, six capital cities 1923 to 1927 = 1,000. *(b)* Base of each group 1966–67 = 100.0. Index numbers are average for year ended 30 June in the year stated. *(c)* Bulk wheat from 1962, previously bagged. *(d)* Base of each group 1989–90 = 100.0.

METEOROLOGY, ADELAIDE

Year	Rainfall		Evaporation	Sunshine	Temperature		
	Days of rain	Total	Total	Total	Extreme maximum	Extreme minimum	Mean
	days	mm	mm	hours	°C	°C	°C
1841	93	459					
1846	114	651					
1851	128	786					
1856	118	635					
1861	147	602			42.8	1.7	17.4
1866	121	514			43.1	2.9	17.7
1871	125	592	1,345		44.1	3.0	17.8
1876	104	344	1,548		45.7	0.3	16.9
1881	127	460	1,422		41.0	1.8	16.7
1886	118	368	1,421	2,588	44.7	2.0	17.1
1891	109	353	1,322	2,753	39.3	2.3	16.8
1896	121	385	1,337	2,644	44.0	1.3	17.4
1901	119	459	1,494	2,523	43.3	1.8	17.5
1906	130	674	1,400	2,366	45.1	2.3	17.6
1911	127	408	1,233	2,415	39.3	1.6	17.2
1916	142	715	1,411	2,512	41.9	3.5	16.7
1921	100	575	1,478	2,658	43.1	2.8	18.2
1926	116	429	1,473	2,689	40.1	3.0	17.3
1931	146	567	1,517	2,534	45.9	3.1	16.8
1936	123	493	1,525	2,431	39.8	2.8	17.1
1941	125	575	1,604	2,472	43.3	3.3	16.9
1946	135	575	1,385	2,301	41.3	2.0	16.3
1951	135	648	1,645	2,339	40.5	2.6	16.9
1956	154	692	1,638	2,379	38.3	4.1	16.4
1961	122	380	n.a.	2,586	40.8	2.9	17.8
1962	125	459	n.a.	2,559	42.7	4.2	17.2
1963	118	621	1,620	2,369	39.9	3.3	17.0
1964	135	557	1,507	2,200	40.3	2.3	16.3
1965	111	340	1,648	2,439	38.8	2.6	17.3
1966	123	495	1,612	2,432	40.7	3.3	16.9
1967	89	256	1,939	2,841	39.0	3.9	17.3
1968	141	656	1,870	2,410	43.1	2.2	17.0
1969	112	526	1,783	2,665	41.1	3.9	16.7
1970	149	484	1,886	2,658	40.5	2.9	16.6
1971	147	674	1,813	2,624	39.6	4.2	17.1
1972	106	448	1,947	2,967	39.6	2.3	17.3
1973	129	677	1,740	2,686	40.5	3.7	17.7
1974	136	638	1,561	2,584	36.9	3.6	17.2
1975	142	523	1,635	2,596	41.2	3.8	17.2
1976	110	367	1,636	2,831	40.5	3.3	16.7
1977	117	400	1,665	2,876	40.3	3.6	17.2
1978 *(a)*	127	588	1,533	2,723	39.3	2.2	16.4
1979	137	660	1,557	2,702	42.0	3.0	17.2
1980	119	527	1,616	2,897	43.3	3.3	17.5
1981	119	671	1,542	2,739	43.4	2.4	17.4
1982	105	357	1,571	2,878	44.2	−0.4	17.4
1983	127	692	1,446	2,745	42.8	0.7	17.0
1984	130	518	1,460	2,802	37.7	1.9	16.7
1985	123	562	1,421	2,716	41.8	1.5	16.9
1986	126	605	1,406	2,705	41.9	1.7	16.5
1987	121	575	1,381	2,780	40.7	1.6	16.8
1988	126	545	1,458	2,777	40.9	3.0	17.8
1989	119	503	1,396	2,650	40.3	1.0	17.2
1990	117	482	1,406	n.a.	42.0	2.0	17.0
1991	116	508	1,498	2,673	43.3	2.6	17.4
1992	152	883	1,267	2,338	39.9	2.7	16.4

(a) Recorded at Bureau of Meteorology, Kent Town from 1978, previously West Terrace, Adelaide.

RURAL PRODUCTION

Land Cultivation

Year	Rural establish-ments	Area of rural establish-ments	Area under crop (b)		Area of pastures top-dressed	Area under irrigation
			Fertilised	Total		
	No.	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha
1846–47				14		
1856–57				82		
1861–62				162		
1866–67				245		
1871–72				339		
1876–77				497		
1881–82				873		
1886–87				925		
1891–92				780		
1896–97				830		
1901–02			335	905		
1906–07			629	873		
1911–12	27,120	47,012	1,010	1,200		
1916–17	29,278	52,475	1,156	1,468		
1921–22	29,693	54,311	1,197	1,367		9.1
1926–27	29,654	54,867	1,430	1,572	66	14.3
1931–32	30,648	52,354	1,705	2,112	56	17.3
1936–37	31,321	55,433	1,619	1,853	366	17.1
1941–42	30,565	58,936	1,409	1,609	427	18.5
1946–47	28,040	59,154	1,366	1,572	450	18.7
1951–52	28,698	61,425	1,284	1,496	870	23.6
1956–57	27,936	60,675	1,376	1,610	1,488	26.7
1961–62	28,886	63,494	1,644	1,825	1,450	43.9
1962–63	28,922	63,413	1,787	1,996	1,518	45.6
1963–64	28,711	64,307	1,938	2,177	1,616	47.7
1964–65	28,754	63,517	1,932	2,141	1,908	49.8
1965–66	28,759	64,505	1,971	2,142	2,061	52.1
1966–67	28,957	65,361	2,073	2,322	2,119	56.2
1967–68	29,058	65,059	2,037	2,270	2,076	70.1
1968–69	29,137	65,603	2,431	2,783	1,728	70.4
1969–70	29,035	65,839	2,138	2,407	2,008	75.3
1970–71	29,087	65,795	1,884	2,141	1,938	77.3
1971–72	29,095	65,146	2,113	2,478	1,822	76.1
1972–73	29,001	65,372	1,864	2,084	2,033	83.1
1973–74	28,738	64,843	2,146	2,451	2,425	80.2
1974–75	28,185	63,825	1,986	2,257	2,138	78.9
1975–76	(a)25,143	63,577	1,821	2,116	1,133	77.9
1976–77	(a)21,597	63,052	1,785	2,036	1,408	n.a.
1977–78	21,909	62,494	2,309	2,565	1,607	n.a.
1978–79	22,022	62,655	2,596	2,827	1,614	78.4
1979–80	23,155	62,786	n.a.	2,772	1,811	n.a.
1980–81	22,249	62,437	n.a.	2,773	1,894	79.5
1981–82	21,402	62,897	2,677	2,865	1,782	n.a.
1982–83	21,172	60,196	n.a.	2,856	1,610	n.a.
1983–84	19,923	62,063	n.a.	3,108	1,631	86.0
1984–85	19,915	62,616	2,633	2,908	1,754	n.a.
1985–86 (c)	14,488	57,854	2,530	3,000	1,551	n.a.
1986–87	15,369	59,471	2,663	3,066	1,522	91.8
1987–88	14,768	59,958	2,699	2,990	1,722	n.a.
1988–89	14,565	58,029	2,457	2,961	2,006	n.a.
1989–90	14,636	57,480	2,491	3,042	1,927	98.9
1990–91	14,482	56,954	n.a.	2,933	n.a.	110.2
1991–92 (c)	13,990	56,857	n.a.	2,920	n.a.	104.1

(a) Changes in scope of the Agricultural Census. *(b)* Excludes pastures grown for crops. *(c)* From 1985–86 establishments with an estimated value of agricultural operations of $20,000 or more and from 1991–92, $22,500 or more.

RURAL PRODUCTION

Crop Areas and Yields

Year	Cereals for grain: Wheat Area	Wheat Yield per hectare	Barley Area	Barley Yield per hectare	Oats Area	Oats Yield per hectare	Hay (a) Area	Orchards (b)(c) Area	Vineyards (b) Area
	'000 ha	tonnes	'000 ha	tonnes	'000 ha	tonnes	'000 ha	'000 ha	'000 ha
1841–42	2	1.40	–	1.12	–	1.12			
1851–52	22	0.85	2	0.92	1	0.98			0.1
1856–57	66	1.68	3	1.19	1	0.90	9	0.4	0.3
1861–62	126	0.74	4	0.89	1	0.91	25	0.7	1.6
1866–67	186	0.96	5	1.13	2	1.00	45	0.9	2.6
1871–72	280	0.39	7	0.53	2	0.49	40	1.1	2.2
1876–77	439	0.36	4	0.60	1	0.48	37	1.3	1.8
1881–82	716	0.31	5	0.64	1	0.48	135	1.8	1.7
1886–87(d)	797	0.37	7	0.73	3	0.56	128	n.a.	2.1
1891–92	628	0.28	5	0.52	5	0.29	123	3.6	5.0
1901–02	706	0.31	6	0.88	14	0.61	150	6.6	8.4
1906–07	683	0.70	11	0.98	23	0.70	121	7.4	9.1
1911–12	887	0.62	17	0.97	44	0.56	211	9.4	9.7
1916–17	1,124	1.11	42	0.94	61	0.54	196	11.7	11.8
1921–22	965	0.70	69	1.08	51	0.46	226	13.1	16.8
1926–27	1,120	0.86	104	1.01	62	0.50	201	12.8	20.3
1931–32	1,648	0.79	98	1.06	84	0.50	218	11.8	21.2
1936–37	1,238	0.63	123	0.78	168	0.26	218	12.0	22.7
1941–42	941	0.88	194	1.37	118	0.58	226	12.0	23.5
1946–47	1,019	0.75	203	0.94	102	0.49	133	11.4	23.6
1951–52	653	1.14	337	1.13	157	0.63	104	11.9	24.8
1956–57	582	1.47	494	1.56	173	0.87	121	13.8	23.2
1961–62	902	1.02	514	0.94	131	0.61	84	15.6	23.4
1966–67	1,198	1.22	448	1.20	206	0.91	195	17.9	23.1
1967–68	1,159	0.63	468	0.60	212	0.28	174	18.3	23.5
1968–69	1,517	1.49	572	1.17	209	1.03	249	18.0	24.5
1969–70	1,299	1.24	560	1.23	150	0.80	155	18.1	26.2
1970–71	802	0.98	693	1.07	195	0.78	196	18.3	27.7
1971–72	1,069	1.32	784	1.34	169	0.98	245	17.2	28.8
1972–73	986	0.83	692	0.74	142	0.52	210	16.7	29.5
1973–74	1,432	1.25	627	1.26	152	0.93	268	16.9	29.6
1974–75	1,220	1.22	701	1.62	135	0.83	190	16.6	30.4
1975–76	958	1.19	832	1.32	119	0.90	159	16.5	31.2
1976–77	839	0.99	855	1.04	117	0.77	164	15.8	31.2
1977–78	1,090	0.47	1,073	0.55	130	0.43	138	15.7	31.5
1978–79	1,295	1.61	1,091	1.30	171	1.04	219	15.7	31.3
1979–80	1,424	1.65	984	1.55	129	1.12	160	15.7	30.7
1980–81	1,445	1.14	989	1.17	105	0.91	161	15.8	30.4
1981–82	1,427	1.18	1,032	1.19	127	0.76	194	16.0	30.3
1982–83	1,398	0.49	1,005	0.66	124	0.52	152	15.9	29.1
1983–84	1,564	1.81	1,104	1.64	153	1.17	258	15.8	27.9
1984–85	1,378	1.47	1,122	1.64	128	1.03	161	16.3	27.0
1985–86(e)	1,432	1.24	1,153	1.46	107	1.01	143	15.2	24.5
1986–87	1,616	1.40	955	1.67	113	1.32	199	15.7	23.1
1987–88	1,556	1.16	876	1.44	132	1.02	180	15.9	23.0
1988–89	1,520	0.90	837	1.24	156	0.85	195	16.4	23.3
1989–90	1,557	1.67	900	1.92	172	1.45	248	16.7	24.6
1990–91	1,448	1.40	945	1.59	135	1.10	207	17.0	25.4
1991–92(e)	1,297	1.65	999	1.88	129	1.33	221	16.6	25.8

(a) Wheaten only to 1906–07, thence all kinds. *(b)* Bearing and non–bearing. *(c)* From 1951–52, private orchards and those no longer worked have been omitted. *(d)* Statistics not collected and particulars estimated. *(e)* From 1985–86 establishments with an estimated value of agricultural operations of $20,000 or more and $22,500 or more from 1991–92.

RURAL PRODUCTION

Livestock and Associated Produce

Year	Livestock numbers				Slaughterings			Wool production (a)	Milk production
		Cattle							
	Sheep	Total	Dairy cows	Pigs	Sheep and lambs	Cattle and calves	Pigs		
	'000	'000	'000	'000	'000	'000	'000	'000 kg	'000 L
1846–47	681	57							
1851–52	1,250	100							
1856–57	1,962	273		28					
1861–62	3,038	265		69				5,971	
1866–67	3,912	124		60				8,954	
1871–72	4,412	143		96				11,752	
1876–77	6,133	219		102				19,253	
1881–82	6,804	294		120				22,118	
1886–87	6,542	285		140				22,934	
1891–92	7,646	399	80	82				26,133	
1901–02	5,012	225	75	89				20,209	
1906–07	6,625	326	98	111				22,193	
1911–12	6,172	394	122	93	1,276	87	88	27,372	127,077
1916–17	5,091	289	144	119	686	62	90	17,025	136,174
1921–22	6,257	419	166	88	1,208	95	103	26,202	188,199
1926–27	7,284	340	127	79	1,091	143	122	32,824	183,817
1931–32	6,609	265	128	110	1,379	81	136	30,400	227,309
1936–37	7,905	328	170	85	1,697	166	177	34,747	289,581
1941–42	10,246	399	179	114	2,070	154	289	47,683	358,687
1946–47	7,959	424	187	134	1,662	146	159	42,193	426,878
1951–52	11,470	437	176	63	1,547	216	114	61,454	393,237
1956–57	14,984	622	195	92	2,329	252	124	85,642	408,694
1961–62	16,415	659	183	170	3,140	201	232	93,886	434,152
1966–67	17,864	687	170	222	3,358	265	316	107,725	448,699
1967–68	16,405	695	157	242	4,019	245	310	101,000	403,693
1968–69	18,392	865	163	288	2,977	220	317	105,714	467,377
1969–70	19,747	1,026	149	351	4,232	249	386	124,529	482,959
1970–71	19,166	1,196	145	389	5,101	264	435	117,258	469,773
1971–72	17,970	1,495	151	479	5,144	290	436	117,922	457,732
1972–73	15,651	1,583	148	499	4,549	393	527	106,006	424,265
1973–74	16,431	1,692	138	385	2,595	359	448	100,131	434,107
1974–75	17,621	1,869	142	349	2,984	465	344	107,452	426,371
1975–76	17,279	1,891	142	326	3,561	549	342	101,912	397,500
1976–77	15,132	1,608	126	317	3,426	656	344	98,442	354,912
1977–78	14,073	1,242	117	311	3,240	744	376	87,092	316,681
1978–79	14,940	1,086	110	330	2,523	659	402	87,355	321,199
1979–80	16,046	1,067	107	398	3,451	502	472	95,459	331,345
1980–81	17,056	1,091	104	394	3,549	539	519	105,052	319,438
1981–82	16,709	1,013	102	374	3,339	580	528	103,617	305,648
1982–83	15,448	828	101	405	4,072	629	540	103,007	340,292
1983–84	16,368	813	101	416	2,846	447	551	106,913	381,484
1984–85	17,263	846	102	402	3,428	434	589	108,463	371,942
1985–86 (b)	17,506	854	100	408	3,856	429	588	111,564	364,480
1986–87	17,234	912	100	422	4,009	461	643	115,805	373,642
1987–88	17,352	947	97	441	4,154	453	602	122,420	377,062
1988–89	17,414	943	92	450	3,961	408	659	120,298	369,528
1989–90	18,363	969	89	437	4,580	456	621	136,294	355,979
1990–91	17,153	990	87	400	4,786	398	599	118,569	366,016
1991–92	16,072	1,016	89	420	4,869	405	524	110,850	410,982

(a) Year ended March to 1979–80. *(b)* From 1985–86 establishments with an estimated value of agricultural operations of $20,000 or more and $22,500 or more from 1991–92.

GROSS VALUE OF RURAL PRODUCTION ($'000)

Year	Agricultural				Pastoral			Total rural production
	Wheat	Barley	Fruit (including vines)	Total crops	Wool (a)	Total	Dairying	
1916–17	21,729	599	1,653	27,677	4,274	11,200	2,759	42,909
1921–22	12,577	1,227	3,491	23,221	5,752	8,296	3,678	37,273
1926–27	19,052	1,685	4,082	30,181	8,937	12,140	3,895	48,357
1930–31	8,091	893	3,241	15,708	3,608	5,801	3,121	26,335
1931–32	17,163	1,363	3,442	25,291	3,843	5,452	3,140	35,444
1936–37	14,955	1,766	4,191	26,044	8,720	12,315	4,310	44,366
1941–42	13,913	4,490	4,725	30,142	10,294	13,875	6,735	53,016
1946–47	27,685	7,598	8,283	51,209	17,092	22,602	10,950	90,106
1947–48	50,154	26,228	9,677	99,477	32,606	37,487	12,525	155,615
1948–49	32,450	10,242	10,087	64,138	40,268	47,636	13,440	131,527
1949–50	40,834	14,524	10,616	81,707	56,268	63,058	16,148	167,594
1950–51	45,587	19,803	13,720	97,871	132,494	139,895	15,500	259,627
1951–52	45,288	27,706	20,382	120,507	72,394	86,034	21,145	234,587
1952–53	57,302	42,128	19,161	139,160	97,158	109,154	23,527	279,982
1953–54	43,939	28,804	20,788	115,744	88,866	105,950	24,238	254,537
1954–55	41,591	23,243	17,426	104,914	83,204	101,059	25,037	239,022
1955–56	38,514	25,227	20,335	110,570	79,822	100,882	30,826	250,685
1956–57	44,846	34,022	23,265	129,994	114,578	138,118	29,003	305,365
1957–58	20,970	19,573	24,435	90,089	84,708	111,027	26,384	235,337
1958–59	43,791	39,889	23,984	140,858	67,595	99,135	32,103	280,007
1959–60	16,495	10,999	21,394	71,092	85,382	123,351	29,454	231,751
1960–61	68,001	37,977	24,525	161,437	70,484	94,451	30,306	294,087
1961–62	51,515	22,952	27,051	124,022	85,801	111,850	29,848	273,451
1962–63	56,285	19,152	25,857	128,417	92,514	127,386	31,968	295,043
1963–64	77,660	26,399	29,567	165,634	113,409	150,466	34,267	358,802
1964–65	74,550	30,135	36,200	178,132	94,328	135,916	37,533	360,507
1965–66	59,559	20,234	31,411	144,017	103,635	152,244	39,293	345,015
1966–67	79,612	26,912	36,779	184,090	104,588	169,226	40,303	404,864
1967–68	42,183	12,818	32,423	127,288	79,925	129,504	37,163	306,222
1968–69	112,551	25,657	37,815	221,097	95,054	136,070	39,016	408,842
1969–70	82,332	23,724	43,330	184,284	91,224	148,939	40,834	386,041
1970–71	40,562	34,902	45,991	164,895	65,525	123,858	43,918	347,038
1971–72	76,381	40,295	49,753	213,206	85,701	153,068	47,262	430,704
1972–73	44,588	27,506	54,415	177,768	164,577	261,753	47,808	503,315
1973–74	196,444	68,276	52,347	392,747	173,180	n.a.	(b)27,541	772,523
1974–75	163,922	119,305	77,719	432,455	122,442	n.a.	31,498	705,446
1975–76	118,063	105,865	77,401	373,062	131,865	n.a.	30,170	676,873
1976–77	73,726	93,807	90,318	330,398	153,550	n.a.	30,436	709,603
1977–78	50,349	50,553	99,747	287,931	145,277	n.a.	34,293	696,739
1978–79	265,159	118,303	110,481	607,348	161,985	n.a.	37,407	1,080,204
1979–80	357,058	192,758	120,174	785,848	215,423	n.a.	42,341	1,341,567
1980–81	253,598	165,418	129,307	692,726	246,646	n.a.	48,953	1,321,495
1981–82	269,453	168,727	149,173	759,240	260,548	n.a.	51,912	1,428,587
1982–83	120,849	98,132	132,924	505,432	258,848	n.a.	67,412	1,194,336
1983–84	466,138	273,466	155,067	1,119,546	289,266	n.a.	73,996	1,785,028
1984–85	350,518	249,179	184,522	958,753	297,183	n.a.	70,372	1,634,301
1985–86	327,881	207,314	183,078	916,462	330,150	n.a.	74,529	1,598,917
1986–87 (c)	334,283	182,175	194,946	975,433	389,279	n.a.	80,758	1,816,446
1987–88	301,342	151,162	215,053	937,043	575,348	n.a.	87,496	2,017,035
1988–89	289,677	167,437	289,841	1,064,627	612,190	n.a.	93,542	2,220,652
1989–90	516,195	281,752	284,581	1,442,421	597,296	n.a.	98,860	2,566,927
1990–91	274,893	193,897	250,073	1,040,818	395,816	n.a.	109,979	1,898,690
1991–92	430,448	266,060	315,192	1,379,314	324,043	n.a.	113,179	2,178,711

(a) Shares of profits from sale of wool under war-time disposal schemes excluded. *(b)* Dairying before 1973–74 included the value of dairy cattle and pigs slaughtered. From 1973–74 dairying consists of milk intake by factories for market milk sales and manufacture. *(c)* From 1985–86 figures are based on Agricultural Census production except for wool. Before 1985–86 the valuation is adjusted to industry estimates *e.g.* Wheat Board receivals. Wool valuation is based on industry estimates.

MANUFACTURING

Year	Establishments at 30 June	Employment at end of June (a)	Wages and salaries (b)	Value added				
				Food etc.	Basic metal products	Transport equipment	Paper etc.	All groups
	No.	No.	$m	$m	$m	$m	$m	$m
1968–69	2,994	116,254	347.6	89.8	64.5	158.2	42.0	643.1
1969–70	2,977	119,856	385.8	104.0	79.9	157.2	49.4	714.6
1970–71			Census not conducted for 1970–71					
1971–72	2,979	121,678	469.3	134.5	80.0	141.3	61.1	803.0
1972–73	2,914	125,489	523.2	152.8	93.5	155.1	66.2	896.7
1973–74	2,984	131,368	665.3	176.3	134.8	187.1	76.6	1,109.7
1974–75(c)	2,131	117,394	796.8	216.9	164.8	249.8	88.8	1,335.3
1975–76	2,287	117,099	871.6	252.9	135.7	285.4	102.9	1,485.7
1976–77	2,242	114,103	981.4	293.8	153.2	249.1	113.3	1,597.0
1977–78	2,170	105,832	1,015.2	315.4	148.2	257.3	128.6	1,672.2
1978–79	2,119	106,440	1,052.0	332.5	206.9	301.4	136.6	1,851.4
1979–80	2,143	105,621	1,185.9	356.0	248.6	447.9	156.5	2,233.0
1980–81	2,131	104,086	1,283.0	422.8	246.5	426.6	172.6	2,387.4
1981–82	2,219	103,624	1,445.7	485.7	242.9	445.6	197.3	2,620.4
1982–83	2,099	90,372	1,502.3	547.4	214.4	551.6	206.9	2,708.6
1983–84	2,110	91,698	1,472.2	534.4	270.6	449.7	218.2	2,841.5
1984–85	2,196	92,533	1,604.0	528.9	286.7	490.1	279.0	3,095.0
1985–86			Census not conducted for 1985–86					
1986–87	2,267	90,258	1,809.1	623.5	411.9	625.6	317.8	3,732.5
1987–88	2,505	95,168	2,003.4	n.a.	n.a.	n.a.	n.a.	n.a.
1988–89	2,543	103,096	2,315.1	n.a.	n.a.	n.a.	n.a.	n.a.
1989–90 (c)	2,382	96,702	2,438.7	1,054.4	423.4	2,207.4	406.1	6,952.0
1990–91	3,184	94,349	2,551.6	n.a.	n.a.	n.a.	n.a.	n.a.

(a) At 30 June. Includes working proprietors. *(b)* Excludes the drawings of working proprietors. *(c)* From 1974–75 to 1989–90 excludes single establishment enterprises employing fewer than four persons.

NOTE: Comparable details of above industry classifications before 1968–69 are not available. However data on Factories was collected before 1968–69.

MINING PRODUCTION

Year	Principal minerals produced							Value of production (b)
	Copper and concentrate	Iron ore (a)	Coal	Natural gas	Crude oil	Condensates	LPG	
	tonnes	'000 tonnes	'000 tonnes	millions m^3	'000 kilolitres	'000 kilolitres	'000 tonnes	$m
1846	6,565							0.3
1856	11,980							0.8
1861	11,440							0.9
1866	23,661							1.7
1871	26,948							1.3
1876	28,597							1.2
1881	25,871							0.8
1886	18,713							0.6
1891	16,894	7						0.6
1896	5,030	–						0.5
1901	8,743	–						1.1
1906	8,340	76						1.7
1911	6,017	43						0.9
1916	7,396	191						2.5
1921	1,557	515						2.1
1926	235	593						2.9
1931	22	293						1.3
1936	458	1,918						5.2
1941	615	2,276						7.1
1946	–	1,847	138					6.1
1951	2	2,439	395					9.9
1956	12	3,645	489					(c)47.9
1961	8	4,055	1,133					58.2
1962	4	3,567	1,414					54.0
1963	16	4,310	1,536					62.4
1964	55	4,437	1,764					67.6
1965	116	4,463	2,048					67.9
1966	143	4,876	2,053					72.3
1967	1,470	4,645	2,077					69.3
1968	518	5,566	2,112					77.4
1969	3,666	7,042	2,246					98.5
1970(d)	(e)249	7,425	2,155	628				104.2
1971	2,287	7,400	1,626	909				112.3
1972	2,819	6,301	1,536	964				111.6
1973	9,662	6,874	1,571	1,095				134.3
1974	8,830	6,065	1,494	1,255				131.4
1975	10,037	5,448	1,798	1,263				126.0
1976	18,433	4,479	1,819	1,447				131.9
1977	16,390	3,450	1,920	2,006				153.1
1978	11,975	2,189	1,757	2,516				144.6
1979	14,784	2,705	1,514	2,860				174.2
1980	14,183	2,701	1,723	3,430				224.0
1981	12,955	2,370	1,737	3,870				226.1
1982	16,310	2,241	1,425	4,260				259.4
1983	16,287	1,337	1,435	4,440	208.9	87.4		404.9
1984	15,578	1,469	1,269	4,489	1,047.6	168.8		641.9
1985	7,456	1,676	1,757	4,733	1,105.4	741.1	366	971.7
1986	10,609	1,876	2,182	4,864	1,441.0	843.5	525	1,099.2
1987	–	2,056	2,435	4,792	1,402.6	718.8	464	899.9
1988	1,686	1,975	2,557	4,747	1,308.9	860.4	523	949.7
1989	17,352	2,346	2,675	4,827	1,650.7	752.3	579	1,080.8
1990	48,564	2,439	2,922	4,891	1,492.0	647.8	494	1,221.9
1991	50,657	2,313	2,469	4,364	1,325.7	613.5	486	1,371.6
1992	66,880	2,264	2,820	4,339	1,298.5	826.3	510	1,371.2

(a) Includes jaspilite. *(b)* Value at site of production. Quarries included from 1916. *(c)* Comparability affected by revaluation of iron ore. *(d)* Year ended 30 June from 1970. *(e)* Metallic content from 1969–70.

Source: South Australian Department of Mines and Energy.

TRADE

Overseas Exports

Year	Value of exports				Proportion of total exports: selected countries of destination				
	Total	Wheat and flour	Barley	Wool (b)	Japan	New Zealand	UK	USA	Other countries
	$'000	$'000	$'000	$'000	%	%	%	%	%
1861	1,837	76		1,302		3.42	89.46		7.12
1871	3,630	578		1,948		4.00	89.62	n.a.	6.38
1876	5,928	2,146		2,884		1.96	89.58	0.07	8.39
1881	6,311	1,846		3,496		0.71	82.03	–	17.26
1886	5,877	420		3,508		0.69	86.90	0.04	12.37
1891	11,197	2,728		3,776	0.01	0.29	80.82	0.90	17.98
1896	8,111	222		3,038	1.38	0.48	56.39	0.28	41.47
1901	8,866	2,232		2,208	0.07	0.65	51.62	0.10	47.56
1906	13,742	4,780		3,360	–	0.26	51.68	0.24	47.82
1911	20,350	7,671	2	4,007	0.04	0.17	45.96	0.13	53.70
1915–16	12,272	3,511	19	2,824	–	1.01	42.92	21.15	34.92
1920–21	35,339	28,675	1,175	6,035	–	1.11	59.40	1.16	38.33
1925–26	38,900	14,825	275	8,865	6.88	1.70	51.94	1.16	38.32
1930–31	20,123	6,078	685	3,006	2.38	0.81	54.11	0.79	41.91
1935–36	30,762	9,020	707	7,561	6.66	2.05	67.44	1.11	22.74
1940–41	26,393	8,617	226	6,656	5.29	3.46	50.46	15.48	25.31
1945–46	40,307	7,407	718	14,917	–	4.95	25.45	26.43	43.17
1950–51	215,348	36,852	14,662	109,900	5.90	2.39	39.58	14.41	37.72
1955–56	195,332	26,266	14,069	70,063	6.71	7.47	38.70	10.71	36.41
1960–61	198,557	36,598	19,219	64,328	18.11	5.60	27.55	4.71	44.03
1961–62	243,975	47,819	23,422	83,107	14.80	4.14	25.83	8.56	46.67
1962–63	212,945	32,603	6,968	83,400	16.45	4.57	25.87	8.69	44.42
1963–64	322,159	76,337	13,828	107,398	17.59	4.83	26.63	5.99	44.96
1964–65	302,242	53,256	15,247	92,535	17.22	5.06	25.82	7.49	44.41
1965–66	296,276	45,864	7,050	94,486	18.38	5.89	22.81	10.37	42.55
1966–67	325,170	55,675	13,056	98,013	20.43	4.69	15.46	8.85	50.57
1967–68	282,767	31,432	2,321	77,008	21.81	5.05	18.20	11.03	43.91
1968–69	300,934	27,421	11,683	84,747	25.52	4.55	16.46	9.78	43.69
1969–70	417,030	59,457	16,133	81,797	19.02	5.58	17.03	9.41	48.96
1970–71	393,737	83,629	23,670	62,828	18.07	5.66	13.70	6.39	56.18
1971–72	394,064	64,599	35,652	68,189	18.64	7.21	13.83	5.84	54.48
1972–73	521,720	48,684	17,250	149,956	23.89	6.41	8.84	7.47	53.39
1973–74	662,881	103,168	40,790	153,202	19.47	9.18	7.44	4.23	59.68
1974–75	764,410	174,405	99,517	93,273	16.35	6.73	5.71	2.61	68.60
1975–76	685,029	109,526	90,290	115,560	19.69	5.41	5.65	3.55	65.70
1976–77	789,872	84,884	88,072	172,538	21.31	5.33	5.99	4.17	63.20
1977–78	661,887	51,915	39,512	114,517	16.21	6.50	4.10	6.25	66.94
1978–79(a)	922,754	101,750	71,470	147,010	15.18	5.74	3.45	9.16	66.47
1979–80	1,599,199	376,726	191,806	183,745	11.00	4.42	2.01	6.45	76.12
1980–81	1,400,028	307,803	153,118	225,336	12.25	5.53	2.27	5.40	74.55
1981–82	1,275,938	212,636	105,280	213,237	11.00	5.87	2.11	7.26	73.76
1982–83	1,227,125	99,364	64,486	176,830	11.92	6.15	7.62	7.91	66.40
1983–84	1,635,825	272,454	229,422	202,681	11.07	5.94	6.61	7.52	68.86
1984–85	1,921,413	406,345	215,887	202,160	13.10	6.44	4.45	8.38	67.63
1985–86	1,988,233	305,995	236,026	231,253	17.96	5.21	3.66	6.83	66.34
1986–87	2,047,147	321,268	181,771	282,040	14.72	6.83	3.56	9.40	65.49
1987–88	2,263,360	286,086	102,454	378,065	17.37	7.30	4.15	9.52	61.66
1988–89	2,446,832	287,472	132,080	395,125	15.70	9.33	4.41	7.02	63.54
1989–90	2,841,290	438,411	243,151	269,184	12.43	10.34	4.16	8.41	64.66
1990–91	3,005,365	338,540	205,379	249,372	14.74	6.38	6.02	10.80	62.06
1991–92	3,149,885	352,291	168,565	342,578	16.97	6.38	6.08	8.75	61.82

(a) From 1978–79 statistics are 'State of Origin', previously 'State of Lodgement of Documents'. *(b)* From 1983–84 'Wool and other animal hair' (including wool tops).

TRADE

Overseas Imports; Retail Sales and Turnover

Year	Value of imports: Total	Value of imports: Metals, metal manufactures, and machinery (a)	Proportion of total imports: selected countries of origin: Japan	UK	USA	Other	Retail sales of goods	Turnover of retail establishments
	$'000	$'000	%	%	%	%	$m	$m
1861	2,756	310		80.14	0.32	19.54		
1871	2,891	342		81.85	1.45	16.70		
1876	6,428	1,084		81.30	1.44	17.26		
1881	7,133	1,022		79.06	3.80	17.14		
1886	5,003	770	0.01	78.90	6.82	14.27		
1891	8,063	1,644	0.02	71.36	7.91	20.71		
1896	6,475	1,198	0.18	68.59	7.82	23.41		
1901	7,854	1,432	0.38	56.91	14.17	28.54		
1906	7,965	2,104	0.64	63.10	10.17	26.09		
1911	12,492	4,132	1.31	58.60	12.81	27.28		
1915–16	10,304	2,816	3.12	47.68	19.81	29.39		
1920–21	24,764	6,558	1.55	42.07	21.25	35.13		
1925–26	28,160	10,602	1.13	43.30	27.84	27.73		
1930–31	7,833	1,802	1.14	36.96	16.66	45.24		
1935–36	10,839	3,616	2.24	38.65	21.16	37.95		
1940–41	10,924	3,158	1.56	38.09	12.01	48.34		
1945–46	17,556	3,622	–	62.28	10.13	27.59		
1950–51	112,002	50,446	1.98	48.31	8.42	41.29		
1955–56	125,504	64,656	3.18	49.17	11.70	35.95	347.8	
1960–61	142,764	72,570	5.37	32.66	17.61	44.36	448.9	
1961–62	103,386	46,774	3.28	31.95	21.87	42.90	451.6	
1962–63	139,826	71,820	4.08	31.83	22.92	41.17	479.9	
1963–64	179,651	94,302	4.72	24.75	30.63	39.90	525.3	
1964–65	204,856	108,243	8.01	23.72	29.11	39.16	574.5	
1965–66	198,156	103,032	6.84	23.32	27.25	42.59	602.0	
1966–67	196,771	97,861	7.69	21.64	27.72	42.95	627.1	
1967–68	215,619	113,215	7.16	17.29	32.71	42.84	663.6	
1968–69	231,956	134,222	11.19	19.82	27.35	41.64	706.9	
1969–70	201,223	98,204	10.77	21.49	21.50	46.23	762.3	
1970–71	198,358	98,358	14.44	25.10	17.32	43.14	818.8	
1971–72	189,748	83,083	15.08	22.83	14.48	47.61	890.9	
1972–73	199,978	88,271	20.48	17.49	15.08	46.95	1,037.1	
1973–74	313,915	142,187	22.57	12.03	16.91	48.49	1,237.3	
1974–75	482,077	216,355	19.17	14.20	13.10	53.53	1,503.3	
1975–76	501,476	203,407	18.57	11.14	14.84	55.45	1,781.1	
1976–77	629,309	259,695	22.23	8.52	13.38	55.87	2,025.4	
1977–78	628,568	248,236	21.79	8.85	12.47	56.89	2,162.7	
1978–79	865,554	437,704	18.97	6.74	26.75	47.54	2,344.7	
1979–80	882,457	300,393	17.25	7.18	13.09	62.48	2,528.3	
1980–81	1,072,425	363,735	20.00	5.07	12.55	62.38	2,852.1	
1981–82	1,337,301	563,750	21.24	3.69	13.38	61.69	3,181.7	
1982–83	1,244,243	515,143	23.36	4.26	15.92	56.46	3,512.3	4,340.5
1983–84	1,318,693	504,009	24.32	3.93	16.33	55.42	3,840.0	4,738.4
1984–85	1,603,240	722,555	29.86	4.71	16.62	48.81	4,065.6	5,015.5
1985–86	1,736,757	953,754	38.62	4.71	15.22	41.44	4,484.8	5,529.2
1986–87	1,501,827	761,376	37.96	4.47	13.12	44.45	4,663.2	5,735.4
1987–88	1,804,614	959,309	35.99	6.66	12.37	44.98	4,910.8	6,056.2
1988–89	1,861,399	966,523	30.62	4.85	17.24	47.29	n.a.	6,458.4
1989–90	2,049,952	1,035,909	25.87	5.76	20.65	47.72	n.a.	6,829.4
1990–91	2,193,725	1,030,443	22.73	4.53	15.65	57.09	n.a.	7,276.3
1991–92	2,376,330	1,225,031	23.36	9.04	15.14	52.47	n.a.	7,341.2

(a) Includes motor vehicles and other transport equipment.

TRANSPORT AND COMMUNICATION ('000)

Year	Motor vehicles on register: Passenger vehicles	Motor vehicles on register: Other motor vehicles	Motor vehicles on register: Total (incl. cycles, scooters)	Drivers and riders licences in force	Telephone services in operation (a)
1901					1,831
1906					2,510
1911					6,086
1916					10,184
1921	13.2		21.4		15,984
1926	42.5	8.2	62.5	79,659	33,547
1931	(b)45.1	(b)12.1	(b)67.3	106,053	39,552
1936	53.7	19.4	84.3	92,227	39,911
1941	54.5	24.4	86.2	122,280	47,962
1946	64.4	31.4	107.2	137,979	53,126
1951	108.9	51.2	183.6	215,157	74,457
1956	161.4	73.2	257.5	299,158	107,649
1957	171.9	75.7	269.3	315,044	114,390
1958	184.3	77.8	283.0	328,833	122,311
1959	200.3	81.0	301.5	340,973	131,060
1960	214.9	84.1	318.3	369,584	138,019
1961	224.5	82.5	325.2	393,869	144,502
1962	238.9	82.5	338.1	397,803	152,785
1963	258.8	83.9	358.2	414,656	162,012
1964	280.1	86.3	380.5	427,717	173,314
1965	298.1	86.4	397.4	447,985	182,249
1966	314.0	87.3	413.5	464,778	192,922
1967	327.7	87.1	427.6	481,496	203,191
1968	342.9	87.6	443.9	491,765	212,842
1969	364.7	89.6	468.2	513,687	224,174
1970	384.0	90.7	490.1	535,184	239,452
1971	400.8	91.5	510.3	550,745	251,330
1972	420.4	92.8	536.0	570,562	261,608
1973	445.4	97.9	572.4	592,481	278,687
1974	468.6	100.6	601.3	612,693	298,300
1975	491.5	104.0	628.9	637,248	311,804
1976	513.0	112.7	657.9	658,671	334,948
1977	528.8	116.9	677.5	690,663	361,334
1978	536.5	118.7	685.6	716,991	390,852
1979	(c)542.0	(c)117.7	(c)689.3	737,410	420,871
1980	(d)554.9	(d)120.0	(d)708.6	751,458	449,724
1981	564.9	123.8	725.4	762,372	480,873
1982	(c)580.4	(c)126.8	(c)744.0	779,110	507,234
1983	593.3	132.6	763.7	797,971	532,107
1984	613.9	138.6	790.2	814,046	558,380
1985	634.7	144.9	816.9	833,118	591,448
1986	651.5	148.2	835.8	845,073	605,272
1987	654.2	148.0	834.9	858,931	628,541
1988	666.2	149.1	846.3	863,796	646,658
1989	680.3	152.1	862.5	882,176	674,037
1990	698.9	154.9	883.5	904,388	(e)707,176
1991	680.0	147.1	857.8	944,004	740,853
1992	719.6	141.8	889.5	941,493	n.a.

(a) At 30 June from 1916; at 31 December in earlier years. *(b)* Previously all motor vehicles had to be registered but from 1930 only those in actual use on the roads. *(c)* At Census 30 September. *(d)* At 30 June from 1980. *(e)* Figures from 1989–90 include Northern Territory.

PUBLIC FINANCE

Year	State Government						Local government revenue		
		Expenditure		Public debt					
	Total revenue	From revenue	From loan (net)	Total	Per head	State taxation	From rates	Govern-ment grants	Total
	$'000	$'000	$'000	$'000	$	$'000	$'000	$'000	$'000
1840–41	51	180							
1845–46	95	77							
1850–51	445	367				202			
1855–56	960	1,160		590	5.50	326		54	114
1860–61	1,117	966		1,733	13.30	282	46	40	114
1865–66	1,900	2,130		1,551	9.20	478	60	60	162
1870–71	1,556	1,519		4,335	23.00	498	80	74	194
1875–76	2,640	2,647		7,674	34.20	920	118	80	286
1880–81	4,344	4,108		22,394	78.30	1,168	188	136	488
1885–86	4,558	4,767	2,800	36,680	118.60	1,603	208	108	502
1890–91	5,464	5,207	968	43,315	135.80	1,655	276	254	702
1895–96	5,043	5,019	886	48,433	137.60	1,600	264	194	652
1900–01	5,648	5,693	845	52,129	146.40	1,203	302	222	738
1905–06	5,612	5,437	900	60,165	165.80	735	348	198	740
1910–11	8,363	7,929	3,752	(a)56,065	136.50	1,092	481	336	1,004
1915–16	8,714	9,483	4,371	79,049	179.40	1,403	652	302	1,150
1920–21	14,303	15,087	9,351	104,725	210.70	3,244	986	580	1,936
1925–26	20,948	20,922	12,860	160,521	290.10	5,428	1,640	942	3,441
1930–31	21,452	25,079	6,581	199,055	345.70	6,800	1,672	397	2,612
1935–36	22,819	22,521	2,502	211,397	359.70	6,409	1,665	509	2,824
1940–41	25,849	26,015	2,548	219,599	365.30	8,683	1,851	577	3,170
1945–46	32,687	32,687	3,419	221,498	348.80	(b)4,036	2,040	451	3,474
1950–51	67,344	66,885	33,871	296,776	405.20	8,104	3,830	1,963	7,579
1955–56	118,805	121,665	42,666	512,179	603.60	16,150	8,162	4,381	16,310
1960–61	172,559	170,182	44,739	722,038	743.20	23,425	13,076	(c)3,524	25,034
1965–66	236,816	243,650	55,089	955,128	872.30	37,636	20,412	4,106	38,020
1970–71	386,859	386,838	71,491	1,256,337	1,070.40	62,745	29,118	4,758	49,589
1971–72	455,245	456,312	111,740	1,333,720	1,124.10	97,476	32,224	7,653	54,886
1972–73	520,866	524,777	117,411	1,415,129	1,161.94	120,474	35,874	15,025	65,917
1973–74	641,967	645,368	107,566	1,481,337	1,198.30	156,903	42,202	10,508	67,682
1974–75	828,985	820,601	123,854	1,425,333	1,138.35	219,190	53,804	19,118	96,000
1975–76	1,036,985	1,034,698	160,602	1,394,702	1,094.66	272,760	65,670	33,551	123,287
1976–77	1,174,025	1,183,180	175,552	1,495,737	1,163.00	314,280	76,385	34,881	137,364
1977–78	1,167,196	1,192,063	171,329	1,605,834	1,243.10	323,502	85,680	38,052	156,074
1978–79	1,264,705	1,258,252	161,087	1,702,221	1,310.81	342,307	95,525	34,774	168,771
1979–80	1,384,589	1,384,589	149,584	1,781,600	1,365.84	369,490	104,891	38,501	186,925
1980–81	1,548,299	1,554,885	149,363	1,872,699	1,426.49	387,453	118,745	45,233	214,213
1981–82	1,705,499	1,766,772	84,913	1,962,590	1,481.20	438,152	132,691	52,097	240,507
1982–83	1,923,808	2,032,765	85,433	2,035,762	1,521.38	(d)537,148	150,923	64,814	288,107
1983–84	2,160,679	2,190,399	143,775	2,010,259	1,485.78	659,427	167,603	82,419	331,803
1984–85	2,639,937	2,626,240	173,877	1,990,537	1,457.63	788,143	187,089	100,118	384,267
1985–86	2,966,345	2,955,350	253,757	(e)3,664,000	2,661.24	837,600	206,899	103,163	417,693
1986–87	3,217,176	3,214,926	363,519	4,046,000	2,906.61	917,800	228,336	97,975	445,853
1987–88	4,225,669	4,215,265	295,823	4,004,000	2,851.85	1,076,200	252,148	104,685	488,353
1988–89	4,206,418	4,123,056	282,311	4,165,000	2,936.82	1,267,800	279,332	99,457	532,460
1989–90	4,554,612	4,483,597	251,494	4,303,000	3,007.62	1,349,300	307,909	100,479	573,373
1990–91	4,594,232	4,710,426	242,950	6,737,000	4,655.20	1,520,600	337,979	107,355	613,914
1991–92	4,400,744	4,682,684	188,063	7,268,000	4,979.45	1,658,700	364,565	108,993	647,477

(a) Debt of Northern Territory and Port Augusta–Oodnadatta railway transferred to Commonwealth Government. *(b)* Uniform taxation in force from 1941–42. *(c)* Excludes reimbursement for work done on behalf of Highways Department from 1961. *(d)* Before 1982–83 excluded taxation paid to Special Funds and statutory authorities. From 1966–67 the coverage of this item does not completely coincide with SA Treasury classifications. *(e) Source*: State Treasury. From 1985–86 refers to State public sector net indebtedness, previously indebtedness to Commonwealth only.

PRIVATE FINANCE

Year	Banking			General insurance revenue (a)	Friendly societies members at 30 June
	Trading banks		Savings banks deposits at 30 June		
	Advances	Deposits			
	$m	$m	$m	$'000	No.
1856		1	–		
1861	3	1	–		
1866	6	3	–		
1871	6	3	1		
1876	9	7	2		
1881	13	10	2		
1886	19	10	3		
1891	16	16	4		
1896	9	15	6		
1901	9	13	8		
1906	11	16	10		
1911	17	22	15		
1916	20	27	20		65,540
1921	27	44	33	1,305	70,155
1926	32	52	44	2,045	77,791
1931	44	45	43	1,627	(b)
1936	44	52	51	1,859	71,658
1941	40	64	55	2,643	76,357
1946	32	93	132	2,705	80,419
1951	62	207	196	9,298	71,591
1956	109	241	272	20,590	57,216
1961	147	270	333	32,363	51,551
1966	(c)274	(c)365	559	50,121	51,109
1967	299	369	605	56,114	51,001
1968	345	389	644	59,981	51,070
1969	363	409	692	65,354	50,880
1970	391	423	733	70,640	50,796
1971	411	436	788	76,020	50,488
1972	448	474	874	89,173	50,077
1973	516	620	1,060	98,678	50,664
1974	672	816	1,175	127,473	50,779
1975	749	973	1,395	(d)187,316	49,888
1976	914	1,214	1,617	231,649	48,057
1977	1,147	1,301	1,781	267,640	45,815
1978	1,419	1,302	1,945	(e)266,594	43,051
1979	1,728	1,437	2,138	263,903	41,575
1980	1,938	1,652	2,277	282,268	39,431
1981	2,149	1,813	2,457	307,453	38,061
1982	2,390	1,901	2,596	354,432	36,171
1983	2,562	1,933	2,979	428,695	35,017
1984	2,840	1,977	3,327	n.a.	n.a.
1985	3,430	2,903	3,113	n.a.	n.a.
1986	4,161	3,750	2,971	n.a.	n.a.
1987	4,625	3,784	3,390	n.a.	n.a.
1988	5,433	4,521	3,808	n.a.	n.a.
1989	6,536	5,728	3,594	n.a.	n.a.
1990	(f)13,771		(f)12,074	n.a.	n.a.
1991	15,853		12,709	n.a.	n.a.
1992	16,054		13,050	n.a.	n.a.

(a) Year ended 30 June. *(b)* Membership at 30 June from 1932; previously 31 December. *(c)* Until 1961, average of balances at close of business on Wednesdays during June thereafter average of weekly figures for the month of June. *(d)* From 1974–75 premium income only; details of interest, dividends and rent no longer available. *(e)* Details of brokers are excluded from 1977–78. *(f)* From 1990 all banks.

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